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ABSTRACT

The future is filled with demographic change for the State of Texas. As the population becomes more ethnically diverse, the Texas demographic, economic, and sociocultural profiles also will change. This volume presents a wide range of demographic information on the State of Texas. The 10 chapters look at: (1) the population of Texas: past, present, future; (2) Texas-1980; (3) the ethnic composition of Texas: 1985-2035; (4) changing age composition in Texas; (5) regional distribution of the population; (6) education and the future of Texas; (7) labor force and the economy; (8) other impacts of demographic change; (9) Mexican population--implications for Texas: and (10) Texas in the 21st century. Numerous tables and figures conveying data appear throughout this book. (DB)

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F. Ray Marshall and Leon F. Bouvier

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Population Change

and the

Future of Texas

F. Ray Marshall and Leon F. Bouvier

Population Change and the Future of Texas is published by the Population Reference Bureau, Inc. It is devoted to a discussion of demographic issues of concern to the State of Texas.

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Summary

* Over the 150 years of Texas history, its population has doubled eight times. Most relative growth occurred during the 1800s, but Texas has added 12.6 million people to its 1910 population of 3.9 million and has doubled in size twice during the past 75 years. The estimated population of Texas for 1985 is 16.5 million.

* In 1980, 14,229,191 Texans were enumerated in the U.S. Census of Population making Texas as the third most populous state in the nation. It is likely to surpass New York by 1990 and rank second to California.

* A magnet for migrants and immigrants alike, Texas will continue to grow and should double in size over the next half-century. In marked contrast, the United States population is expected to increase by only 28 percent during the same period.

* The future is filled with demographic change for the state of Texas. Certain recent processes like rural population decline and increasing heterogeneiety which have been prevalent since the 1950s will continue. The present decade has seen a reduction in agricultural employment accompanied by a vitalization of finance, services and trade. Ethnic heterogeneity has been on the rise especially since 1970 when the Hispanic population made up only 16.5 percent of the state; Texas is now nearly 23 percent Hispanic and is expected to contain no ethnic majority by 2015.

* In addition to being ethnically heterogeneous, Texas' population claims diverse places of origin. Both domestic and international migration contribute to the fact that about one-third of all Texans were born outside the state. Of the native-born Americans who migrate to the Lone Star State, forty-five percent come from the South, more than a quarter hail from the North Central Region, and the remainder travel from the West and Northeast.

* Immigrants to Texas accounted for six percent of the state's 1980 population, according to the Bureau of the Census. This proportion is just under the national average of 6.2 percent. Over two-thirds of foreign-born Texans came from Latin America; most of them were Mexican. Proximity to the national boundary prescribes interaction and the border states of California and Texas together host three-quarters of the entire Mexican-born population in the United States.

* Under reasonable assumptions regarding fertility and age-specific immigration rates, Anglo children will lose their majority before the turn of the century; by 1995 they will make up 48 percent of the state's population under age 15. Thirty years from now, young Hispanics will equal Anglos in numbers. If current trends continue, Black youths will comprise smaller proportions in the future while Asian proportions will grow.

* As the population becomes more ethnically diverse, its demographic, economic, and sociocultural profiles will change. The Anglo majority will decline, but the effects of its cycle of demographic behavior will be felt for decades to come, as its small families migrate, age and leave the labor force, emigrate or stay and create a demand for specialized services. Demands on the state's educational system will compete for public funds as the school-age population remains large and becomes increasingly Spanish-speaking. Over the past ten years alone, six percent of Texas public school membership shifted from Anglo to Hispanic -- an indication of what is to come.

* Social and demographic change will alter the composition of the labor force. The supply of young Anglo adults will fall short of replacing those who retire or die. A substitute for the traditional worker will emerge: between 2000 and 2035, Anglo females and minorities will comprise 95 percent of the new entrants into the Texas labor force.

* While the state undergoes restructuring of its ethnic makeup and age composition, each of its six regions will transform differently. Nearly half of the state's population is found in the eastern, metropolitan regions of Houston and Dallas. Hispanics are fewer, incomes are higher, people are better educated and prospects for the future are much different than those in South Texas where a highly Hispanic, blue-collar economy prevails. West Texas should hold its Anglo majority for at least fifty years and age more quickly than the other regions.

* Economically, socially, and culturally, Texas is bound for major change over the next five decades. The rapidity with which the state will become less Anglo and older is variable and dependent primarily upon the rate of immigration from year to year. Fluctuations in age-specific migration rates necessarily affect the dynamics of Texas' demographic profile, the state's labor force and economy, education, public works, voting and politics, health, and even the level of ethnic tension as a function of institutional reform.

This summary was prepared by Joanne Scully, Research Demographer at the Population Reference Bureau, Inc. Ms. Scully developed the projections used as bases for the report, provided technical assistance to the authors, and coordinated the report's production.

Chapter I

The Population of Texas: Past, Present, Future

Texans have just celebrated their sesquicentennial anniversary. At the time of independence in 1836, the population of the Republic of Texas was probably no more than 50,000. Indeed, at the first census taken after joining the United States in 1850, only 212,592 Texans were enumerated.(1)

Today, Texas' population is approaching 17 million marking an increase of 2.7 million over the 14.2 enumerated in 1980. For this study, we have projected that 1980 total forward to 1985. We estimate the population of Texas at mid-decade to be 16,477,510 (Table 1.1)

Over the 150 years of Texas history, its numbers have increased incredibly. Over that same century and a half, many other demographic changes have taken place. The challenges and excitement of Texas were and still are attractive to non-Texans, from within and outside the United States. The state has also witnessed the rapid growth of major cities and by 1980, Texas was the only state with three cities among the ten largest in the nation. In Chapter II, some of these recent changes are discussed in more detail.

The future population of Texas -- its size and composition and what these mean for its social and economic structure -- are the primary concerns of this study. Many projections of the state's population have been prepared by various organizations. The U.S. Census Bureau projects a population of 20.7 million by the turn of the century.(2) The Center for Health and Manpower Studies at the University of Texas School of Public Health has prepared projections of the Texas population to the year 2000. Projections have been prepared by other state agencies as well. All reach somewhat similar conclusions about the size of Texas' population at the turn of the century: between 20.7 and 22.1 million.(3) Projections prepared by Murdock and Hwang at Texas A&M University yield rather different results. If the 1970-80 migration rates persist in the future, the population will reach 21 million in 2000. If the 1980-82 trend is maintained, the 24 million mark will be approached. However, if the slower increase noted between 1982 and 1984 continues Texas will have only 19 million people by that year.(4)

While our methodology and assumptions differ somewhat, the overall projections do not vary widely. Table 1.2 summarizes the period 1985-2035 under our moderate assumptions. By the turn of the century, the population of Texas will surpass twenty-million, and by 2035

it will approximate 30.2 million. Thus over the 50 year period, 1985-2035, the number of Texans will almost double. In marked contrast, the United States population is expected to increase by only 28 percent. According to the most recent Census Bureau projections, the nation will number 307 million in 2035 compared to 239 million in 1985.(5) Texas's proportion of the nation's total will thereby increase significantly, from 7.1 percent in 1985 to 10 percent in 2035.

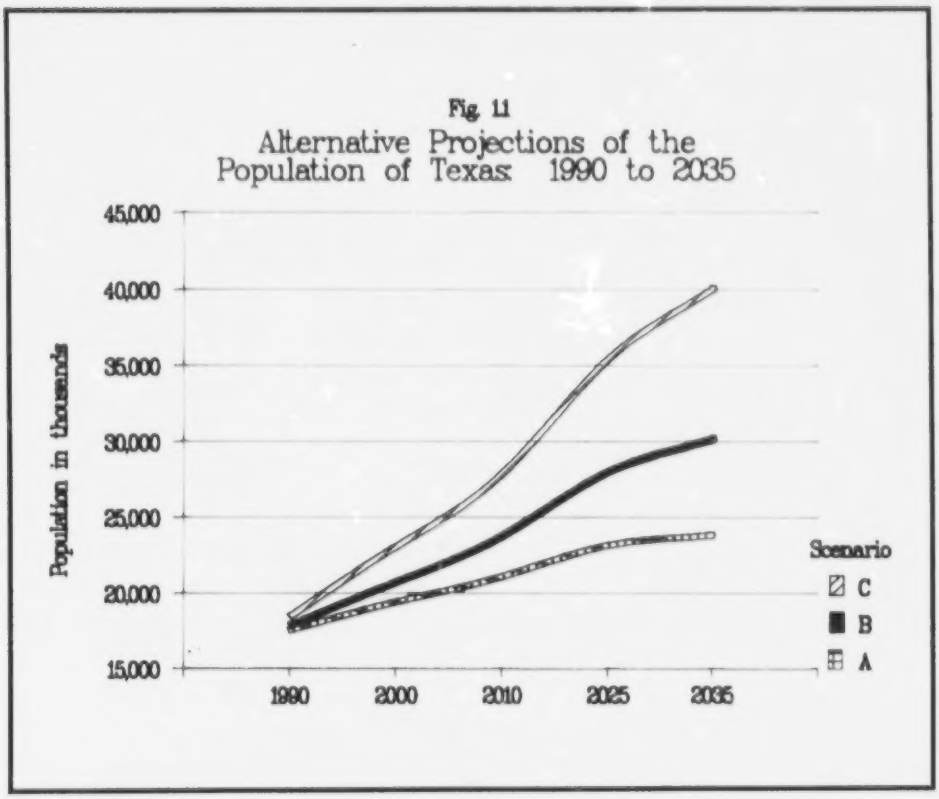
How accurate are these projections? Demographers who make population projections are often asked this question. Demographers always give the same reply. We simply do not know, because these are not predictions, they are not even forecasts, they are projections. A projection is simply the number of persons who will comprise the population of an area at some future point in time according to clearly stated demographic assumptions.

Given specific rates of fertility, migration, and mortality, the population of an area will be a certain number in a certain year. In other words, a population projection is intended to answer the question: "What if...?" It need not even be realistic. Indeed, population projections are sometimes used to demonstrate the utter impossibility of maintaining certain rates of growth. For example, in 1974 the noted demographer, Ansley Coale, calculated that if the then current rate of world population growth (2 percent per annum) continued indefinitely, in less than 700 years there would be one person for every square foot on the earth's surface. (6) Clearly this was not intended as a prediction! Rather it illustrated quite vividly that the planet cannot maintain such a rate of growth for very long. At the other extreme, Bouvier has projected the United States population, without immigration, but maintaining its current fertility and mortality rates. Within four thousand years, the population would be down to two persons!(7) Again this is not a prediction but merely an illustration of something that undoubtedly will not occur.

These examples are extreme, yet they demonstrate what demographer Peter Morrison meant when he wrote: "In fact the purpose of projecting population is not exclusively, or even primarily, to make accurate predictions. Rather, it is to identify and chart the likely effects of influences and contingencies that will determine future population size." (8) Most projections attempt to be realistic. The assumptions generally reflect what appear to be reasonable at a given point in time. Therein lies the most important aspect of making projections. Populations rise or fall because of shifts in fertility, mortality and/or migration. Assumptions are made about future levels of such demographic behavior. Unrealistic assumptions can be used, but more reasonable ones are usually employed. Furthermore, alternative scenarios are sometimes prepared that utilize different assumptions usually about one type of demographic behavior. This allows the user to better adapt them to his or her views about the future.

This report's projections for Texas are based on what we consider reasonable assumptions about future demographic behavior. Our medium scenario (B) will serve as the base for most discussions in the report. Two other projections have been prepared that depict what would occur under lower (A) and higher (C) levels of migration. Only a summary of the assumptions is discussed here. (See Figure 1.1) The reader should refer to Appendix A for a detailed analysis and rationale for all the assumptions.

In all three scenarios, fertility is assumed to converge for all ethnic groups at either 1.8 or 2.2 live births per woman by 2035. In all instances except one, this will mean a decline from rates as high as 4.0 live births per woman. Similarly, life expectancy is assumed to increase for all groups and to converge at 76 years for males and 80 years for females by 2035.



Migration, whether domestic or international, poses the most difficult challenge when developing population projections. Our medium scenario (B) assumes net migration of 122,500 per year of which 72,500 is international and 50,000 domestic. The low level model (A) assumes no international migration whatsoever. Admittedly unrealistic, it nevertheless allows a determination of the actual contribution of immigration to the future population of Texas. The high level model (C) assumes considerable clandestine movements into the state. Net immigration from Latin America is triple the level in the medium scenario and as a result the overall level of in-migration is increased to 232,500 per year, of which 182,500 is international.

Table 1.3 illustrates the variations in future population size that result from these alternative migration scenarios. Without any immigration whatsoever, the state's population would only reach 19.4 million in 2000, almost 1.5 million less than with moderate immigration. By 2035, the difference would amount to 6.3 million as the no immigration scenario projects a population of 23.9 million in that year compared to 30.2 million under the moderate migration model. The high immigration model yields considerably larger numbers in future years. By 2000, the Texas population would be about 23 million; it would approach 40 million 35 years later. Thus, if higher levels of immigration are maintained, the population of Texas will more than double over the next half century.

What will be the size of Texas' population in future years? The B scenario which serves as the source for most of our discussions is conservative, particularly insofar as both domestic and international migration are concerned. This is deliberately so; we prefer to err on the low rather than on the high side of such projections. The 20 million mark should be attained within the next 15 years. Short term projections tend to be quite reliable. As for the longer run, much depends on future levels of both domestic and international migration. That the 30 million mark will be reached well before the middle of the 21st century seems assured; the question remains, when will it be reached -- by 2015 as our High model suggests or perhaps by 2035 as our Medium Scenario projects? That depends on future levels of migration, domestic as well as international.

TABLE 1.1

ESTIMATED POPULATION OF TEXAS - JULY 1 1985

Age	Male	Female	Total
0-4	735527	707932	1443529
5-9	641549	613159	1254708
10-14	643289	615097	1258386
15-19	681043	660342	1341385
20-24	817834	772475	1590309
25-29	860270	798423	1658693
30-34	770707	729366	1500073
35-39	636386	19557	255943
40-44	475162	472535	947697
45-49	375467	381659	757126
50-54	337149	58194	695343
55-59	24017	56538	680555
60-64	294174	333871	628045
65-69	229808	270031	499839
70-74	177107	235423	412530
75-79	117585	169425	287010
80+	91888	174724	266612
Total	8208762	8268751	16477510

TABLE 1.2

PROJECTED POPULATION OF TEXAS: 1985-2035
(in thousands)

Year	Number
1985	16478
1990	17950
1995	19419
2000	20863
2005	22307
2010	23782
2015	25269
2020	26705
2025	28024
2030	29196
2035	30234

TABLE 1.3

ALTERNATIVE PROJECTIONS OF THE POPULATION OF TEXAS: 1990-2035 (population in thousands)

Year	Scenario		
	A	B	C
1990	17544	17950	18570
2000	19420	20863	23083
2010	21116	23782	27900
2025	23212	28024	35488
2035	23879	30234	40110

Notes - Chapter I

1. Frisbie, W. Parker, "Who Are the Texans of 1985?," Paper presented at the Annual Meeting of The Philosophical Society of Texas, College Station, TX, December 1985.

2. "Provisional Projections of the Population of the United States by Age and Sex: 1980-2000." Current Population Reports, series P-25, No. 937, 1983.

3. Smith, Davis P., Eun Sul Lee, and William Spears, "Texas Population Projections 1980-2000," University of Texas School of Public Health, Center for Health and Manpower Policy Studies, 1985.

4. Murdock, Steven H., and Sean-Shong Hwang, "The Slowdown in Texas Population Growth: Post-1980 Population Change in Texas Counties," Texas A&M University, Dept. of Rural Sociology.

5. "Projections of the Population of the United States by Age, Sex, and Race: 1983-2050." Current Population Reports, series P-25, No. 952, 1984. U.S. Bureau of the Census, national projections to 2035.

6. Coale, Ansley J. The history of the human population. Scientific American 231, 1974, p.51.

7. Bouvier, Leon F., unpublished paper, 1983.

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Chapter II

Texas - 1980

The 14,229,191 Texans enumerated in 1980 represented a 27.1 percent increase over the 11,196,730 counted in 1970. Growth throughout the 20th century has been remarkable and has exceeded that for the nation as a whole. In 1900, the state's inhabitants barely surpassed 3 million; thus, a five-fold gain has occurred over 80 years. Indeed the population almost doubled between 1950 and 1980. (Table 2.1)

As a result, Texas' share of the nation's total has grown considerably. By 1980, the state ranked third behind California and New York. As recently as 1960 Texas was sixth and moved ahead of Ohio and Illinois by 1970 and Pennsylvania by 1973.(1) The Census Bureau projects that by 1990 Texas will surpass New York to become the second largest state in the nation.

Four out of five Texans live in urban areas. However, urbanization is a relatively new phenomenon. As recently as 1940, 55 percent of the population was rural. Today, more than 80 percent of Texans live in its metropolitan areas and the largest four (Houston, Dallas-Fort Worth, San Antonio and Austin) include some 8 million inhabitants or 54 percent of the people in the state.

Rural population decline is quite dramatic and is best exemplified by the proportion of the workforce in farm occupations. From 8 percent in 1950, it fell to 2.9 percent by 1980.

Ethnic Composition*: Just under two-thirds (65.8) of the 1980 population were Anglos with another 21 percent Hispanic (92 percent of whom were Mexican); 11.9 percent Black;

---

* The term "ethnic" as used in this report encompasses some distinctions that are often considered racial. Our convention is followed in part for simplicity, but also because some of the most common current categories have at best ambiguous racial bases. For example, South Asians are generally classified as nonwhite, but many are in fact racially Caucasian. People of mixed black/white origin are usually classified as black without regard to whether the greater proportion of their ancestry is in fact white or black. Hispanics are usually classified as whites, even though many of them are racially mixed. Finally, Anglo includes many people not of Anglo-Saxon ancestry, including the co-author of this report! For these reasons, in this report, "ethnicity" rather than "race" will be used.

1.3 percent Asian and Other. Since 1970, Texas has become increasingly diverse. As demographer Parker Frisbie recently wrote: "...the Hispanic population of the state has experienced growth that far exceeds the quite rapid increments to the general population. In 1980, there were nearly 3 million Texans of Hispanic descent, making up 21 percent of the total, as compared to only 16.5 percent in 1970....The growth rate of the Mexican origin population has been phenomenal--that population increased by 70 percent between 1970 and 1980, as compared to a 22 percent increase for Blacks and less than a 15 percent increase for 'Anglos'"(2)

Place of Origin: Both domestic and international migration have contributed significantly to recent growth in Texas. For the 1970-80 decade, 58 percent of the numerical gain resulted from net movements into the state, either from elsewhere in the nation or from abroad.

About one-third of all the people living in Texas in 1980 were born outside the state including 6 percent born outside the United States. Of all the native born in-migrants, more than 45 percent were from the South, 27 percent from the North Central region; 15 percent from the West; and 13 percent came from the Northeast. More than 11 percent of the native-born people living in Texas in 1980 moved from another state after 1975. Their place of earlier residence is fairly similar to those born outside the state: 36 percent from the South, about one-quarter each from the West and the North Central regions and 14 percent from the Northeast. As seen in Table 2.2 there are variations among the four ethnic groups.

The Foreign-Born: According to the 1980 Census, six percent or 856,213 Texans were foreign-born. This proportion is just under the national average of 6.2 percent and considerably smaller than the 15 percent noted in California.

Texas' foreign-born population differs from that of the nation in both country of birth and recency of immigration. Close to half (45.4) of all foreign-born persons in the United States came from Europe or Canada; in Texas these constitute but 15 percent. On the other hand, Mexicans, only 17 percent of the nation's foreign-born, comprise almost 63 percent of those living in Texas. Over two-thirds of all the foreign-born in the state came from Latin America. More than 12 percent of all Latin American immigrants in the United States reside in Texas which is second only to California (36.5) in that regard.

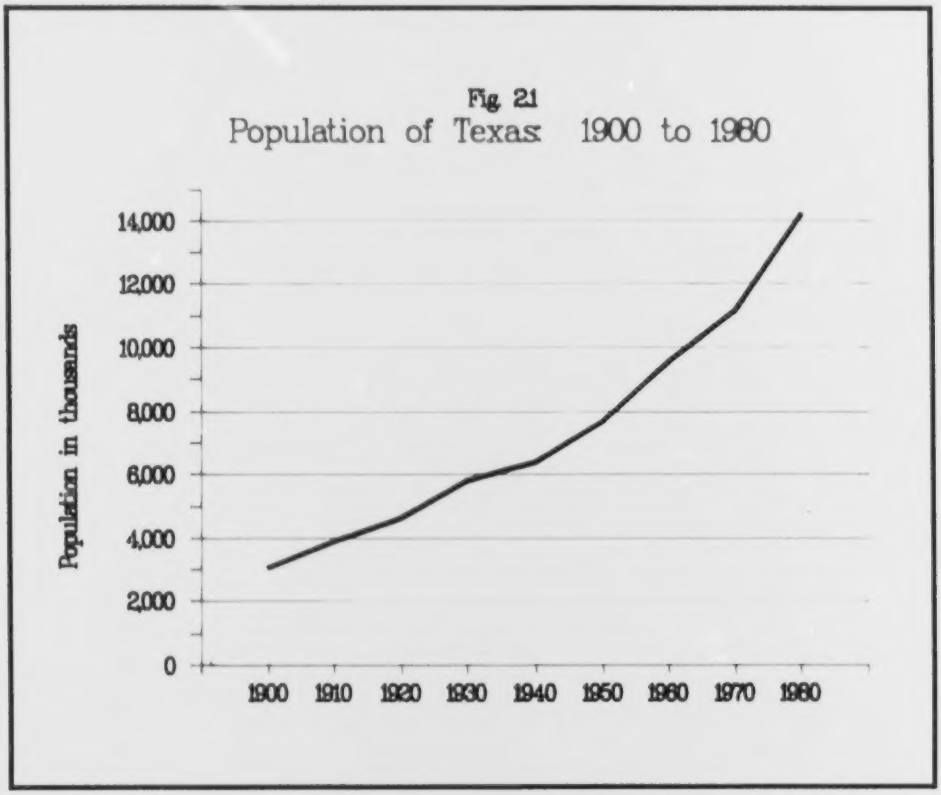
The largest number of immigrants for both Texas and the United States, come from Mexico. (Table 2.4 and Fig. 2.3) That population of the United States is concentrated in a few states. Of the total number of persons born in Mexico, California alone has more than half, Texas nearly a quarter, and Illinois almost 10 percent. Together, these three states

comprise 88.4 percent of the entire Mexican-born population in the United States. (3)

Over half of all foreign-born Texans arrived between 1970 and 1980. Among Asians and Africans, the proportion rises to 80 percent; less than 30 percent of Europeans or Canadians are new immigrants. Over half of all Mexicans and other Latin Americans migrated to Texas since 1970. Mexicans represent 61 percent and other Latin Americans another 6 percent of all recent immigrants to Texas, while Asians account for 22 percent and Europeans and Canadians 8 percent.

The increases in the number of immigrants from Asia and Africa are particularly striking. Texas figures differ markedly from the nation's where Mexicans are less than one-quarter of all recent immigrants while Asians represent one-third; other Latin Americans, Europeans and Canadians each close to 20 percent.

Fig. 21



Characteristics of Texans, 1980: Texas' median age is slightly lower than the nation's -- 28.2 compared to 30.0. (Table 2.8) While almost 31 percent of the nation's population is aged 45 or older, that proportion is only 27.4 in Texas. Texas has slightly more males per 100 females than the nation, on average, 96.8 as opposed to 94.9.

Fertility is a bit higher in Texas as the number of persons per family is 3.33 compared to 3.27 for the nation. Texas women aged 35 and older have had 2.8 children while American women of the same age have had 2.6. The proportion of family households with no male present is slightly higher than the nation's. The proportion of Texas residents aged 25 or older who have completed at least high school was 62.6 percent in 1980 compared to 66.5 percent for the nation. Texas ranked a low 38th among the 50 states on this educational measure. The 4.5 percent of Texans who speak English "not well" or "not at all" is more than twice as high as that for the nation (2.0).

Overall differences in occupation and income between the state and the nation are not great. However, in 1980 the proportion of Texas families below the poverty level was 11.1 percent compared to 9.6 percent for the nation. New York Times writer Robert Reinhold points out that Texas has never been a really rich land. "In 1970, before the gusher, per capita personal income was 5 percent below the national average. In 1982 it rose to slightly above, but by last year [1985] it was 2 percent below, putting Texas 22nd among the states in personal wealth."(4) As Frisbie has commented: "...Texans in the 1980s confront difficult social and economic issues that require continued efforts directed at their resolution."(5)

How do native and foreign-born Texans compare on these demographic and socio-economic characteristics? The native-born include all the residents of Texas born either in the state or elsewhere in the nation. For the foreign-born the discussion is limited to persons born in the main sending countries: Mexico, United Kingdom, Canada, Vietnam. (Germany is not included for lack of available data.) Together these four countries account for more than 70 percent of the foreign-born living in Texas in 1980.

On average, native-born Texans are older than their foreign-born counterparts (Table 2.6). For example, the median age for native-born is 27.8; for Mexican born 24.1. Similarly, sex ratios differ substantially: native born 97 males per 100 females; Mexican-born 118 per 100. Differences are even greater between the native-born and those coming from Vietnam. Canadians and Britains are more similar to native-born Texans insofar as age and sex composition are concerned.

Fig. 22

Place of Birth of U.S.-Born Residents of Texas

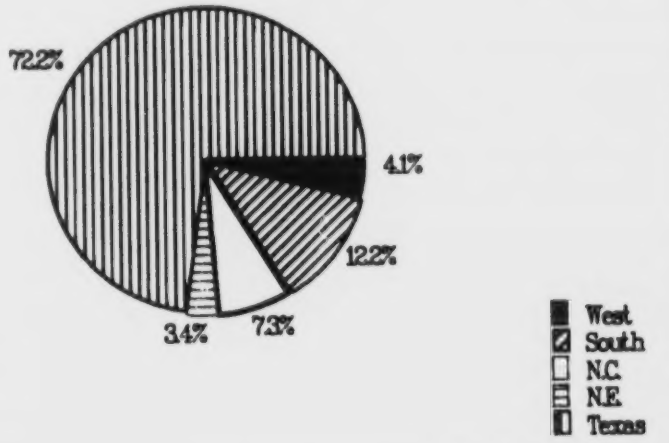
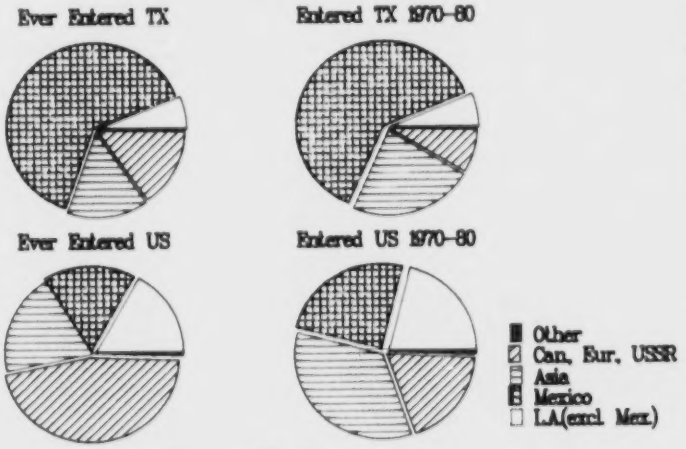


Fig. 23

Place of Birth for Immigrants to Texas and the U.S.



Source: Table 24

Whereas native-born Texans have 3.28 persons per family, Mexicans have 4.47. Vietnamese families are even larger than Mexican. Those from the United Kingdom and Canada closely resemble the native-born Texans.

The proportion of family households with no husband present is greater for the native than the foreign-born. This may be explained, at least in part, by the fairly large number of Blacks in the native-born population.

Turning to social and economic characteristics, 64 percent of all native-born Texans 25 years of age and older, have completed at least four years of high school including 17 percent who finished at least four years of college. Educational attainment among people coming from the United Kingdom and Canada is even higher. Interestingly, the educational attainment of early refugees from Vietnam is almost on a par with the native-born. Among Mexican immigrants, however, only 15.7 percent completed high school and 2.9 percent finished college. (Table 2.7)

Almost all native-born Texans as well as those from the United Kingdom and Canada speak English well. On the other hand, 40 percent of Vietnamese indicated that they spoke the language "not well" or "not at all." The proportion rose to more than 63 percent among the Mexican-born.

The wide divergences in educational attainment are reflected in occupations and income. Some 55 percent of the native-born work at white-collar jobs (i.e. managerial, professional, technical and sales etc.) as do around 75 percent of those born in Canada and the United Kingdom. In marked contrast, less than 12 percent of Mexican-born and 35 percent of the Vietnamese work at such occupations. The latter two groups are overrepresented among blue-collar workers: 65 percent for Vietnamese and 88 percent for Mexicans compared to 24 percent for Britishers, 21 percent for Canadians and 45 percent for the native-born.

In 1979 native-born Texan families earned twice as much as Mexican-born families. The Canadian-born earned three times as much. The Mexican annual average income of $10,253 was low compared to that for Vietnamese ($15,562). It is not surprising that while 10 percent of native-born families fell below the poverty level, no less than 37 percent of Mexican-born, and 30 percent of Vietnamese families did so. Of those familes in poverty, 63 percent of the Mexican-born had no husband present compared to less than 30 percent among the native-born.

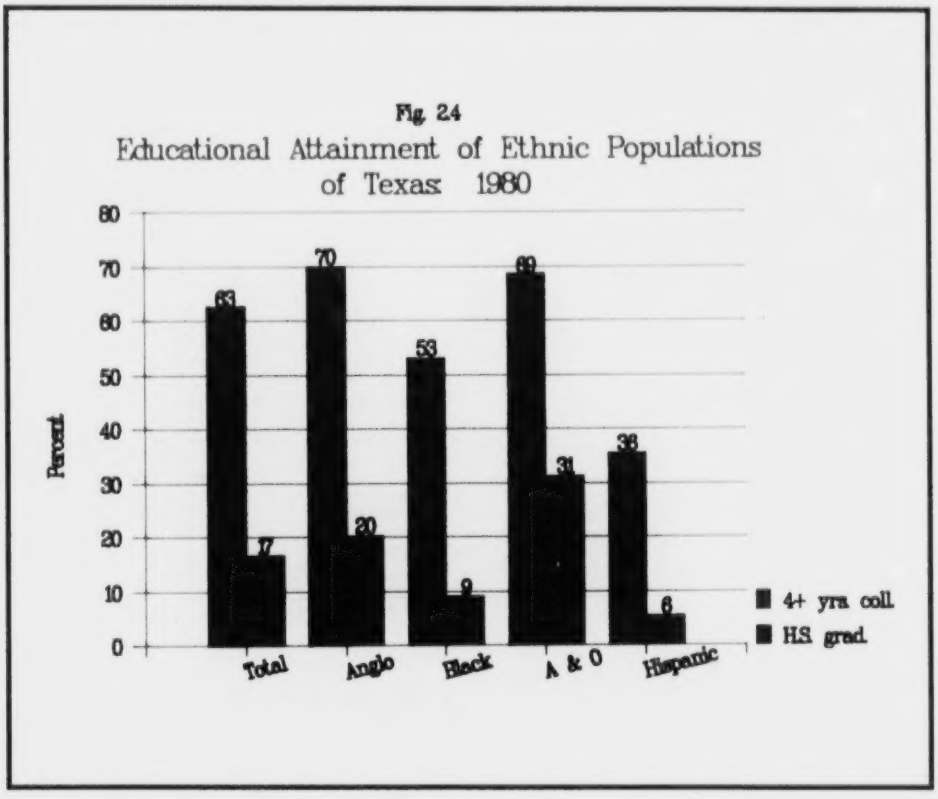
Let us now turn to a comparison of the four ethnic groups who are the main focus of

attention in this study: Anglo, Black, Hispanic, Asian, all irrespective of place of birth. (Table 2.8)

Hispanics are considerably younger than Anglos. A difference of nine years is noted. Blacks and Asians rank between Anglos and Hispanics. Differences in the proportions of males and females are not particularly large with only the Asians having more males than females in their population.

Hispanics have the largest families - 4.16 persons compared to 3.07 for Anglos, 3.53 for Asians and 3.66 for Blacks. Similarly, the number of children ever born to women 35 and older is considerably greater for Hispanics than for others. On average Hispanic women have had 3.7 children while at the other extreme Anglos have had but 2.4. Almost 31 percent of all Black households in Texas have no husband present. This proportion is more than twice that for Anglos and is even greater when compared to Asians and Hispanics.

Fig. 24



Educational attainment statistics illustrate the massive differences among the four ethnic groups. Whereas more than 70 percent of all Anglos 25 and older have completed high school and 20 percent have finished at least four years of college, the respective proportions among Hispanics are 35 percent and 6 percent. More than half of all Blacks living in Texas have completed high school and 9 percent have had four years or more of college. Asians have an even higher overall level of educational attainment than Anglos. Asians, however, were very few in 1980 and shifts in immigration sources since then have undoubtedly led to a reduction in this very high level of schooling. (Fig. 2.4)

Sixty percent of Anglos are employed in what are generally considered white-collar jobs. Almost 56 percent of Asians are similarly employed. The proportion falls to about 35 percent for both Blacks and Hispanics. This division is also noted in family income where Anglos and Asians earn around $20,000 or more while Blacks and Hispanics earn about $13,000. Close to one-quarter of all Black and Hispanic families earn below the amount needed to be considered out of poverty. This compares to less than 15 percent for Asians and under 6 percent for Anglos. The pattern is repeated when examining the proportion of family households with no husband present and below the poverty level; almost half of Hispanic and Black family households fall into this category compared to 35 percent among Asians and 16 percent for Anglos.

Texas has exhibited rapid population growth in recent decades. In addition, it has witnessed a dramatic shift in the sources of that population growth. Not only has internal migration remained high, the level of international migration has increased resulting in a more heterogeneous society than had been seen in perhaps 150 years.

Texas does not always fare particularly well when compared to other states on various social and economic characteristics. This is particularly true in education. The wide discrepancies between Anglos and the other ethnic groups on these various indicators of economic and social "success" warrant further investigation as the future of the state is considered.

TABLE 2.1

POPULATION AND POPULATION GROWTH OF TEXAS: 1900 TO 1980.

Total Population		Percent Change	
1980	14229191	1970-1980	27.1
1970	11196730	1960-1970	16.9
1960	9579677	1950-1960	24.2
1950	7711194	1940-1950	20.2
1940	6414824	1930-1940	10.1
1930	5824715	1920-1930	24.9
1920	4663228	1910-1920	19.7
1910	3896542	1900-1910	27.8
1900	3048710		

TABLE 2.2

PLACE OF BIRTH OF U.S.-BORN RESIDENTS OF TEXAS, BY ETHNIC GROUP: 1980.

Ethnic Group	Place of Birth						
			Diff.	Region			
	Total	Texas	State	NE	NC	SO	W
Total	13372978	9654458	3605541	453319	981015	1629395	541812
	99.16	72.19	26.96	3.39	7.34	12.18	4.05
			100.00	12.57	27.21	45.19	15.03
Anglo	9207250	6052346	3088408	418932	897911	1347923	423642
	99.28	65.73	33.54	4.55	9.75	14.64	4.60
			100.00	13.56	29.07	43.64	13.72
Black	1667536	1358909	302354	17287	27214	235003	22850
	99.62	81.49	18.13	1.04	1.63	14.09	1.37
			100.00	5.72	9.00	77.72	7.56
Asian &	84972	43054	38184	3538	6628	17839	10179
Other	95.61	50.67	44.94	4.16	7.80	20.99	11.98
			100.00	9.27	17.36	46.72	26.66
Hispanic	2413220	2200149	176595	13562	49262	28630	85141
	98.49	91.17	7.32	0.56	2.04	1.19	3.53
			100.00	7.68	27.90	16.21	48.21

NE= Northeast; NC= North Central; SO= South; W= West.
Table refers to native-born who reported state of birth.

TABLE 2.3

RESIDENCE IN 1975 OF THE U.S.-BORN POPULATION RESIDING IN TEXAS IN 1980, BY ETHNIC GROUP

Ethnic Group	Residence in 1975 of Population Age 5+ in 1980						
			Diff.	Region			
	Total	Texas	State	NE	NC	SO	W
Texas	12731140	11294903	1436237	194878	371823	521499	348037
	100.00	88.72	11.28	1.53	2.92	4.10	2.73
			100.00	13.57	25.89	36.31	24.23
Anglo	8634152	7464532	1169620	165286	313333	429500	261501
	100.00	86.45	13.55	1.91	3.63	4.97	3.03
			100.00	14.13	26.79	36.72	22.36
Black	1512500	1399068	113432	13372	19872	57446	22742
	100.00	92.50	7.50	0.88	1.31	3.80	1.50
			100.00	11.79	17.52	50.64	20.05
Asian &	114907	82471	32436	6282	7386	10127	8641
Other	100.00	71.77	28.23	5.47	6.43	8.81	7.52
			100.00	19.37	22.77	31.22	26.64
Hisp.	2469581	2348832	120749	9938	31232	24426	55153
	100.00	95.11	4.89	0.40	1.26	0.99	2.23
			100.00	8.23	25.87	20.23	45.68

TABLE 2.4

FOREIGN-BORN POPULATION FOR TEXAS AND THE U.S., BY PERIOD OF ENTRY TO THE U.S. AND COUNTRY OR REGION OF BIRTH: 1980.

Place of Birth	Foreign Born Population							
	Texas				United States			
	Ever Entered		Entered '70-'80		Ever Entered		Entered '70-'80	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All Countries	794434	98.66	419974	97.94	13193882	98.49	5243223	97.52
Latin America (excl. Mex.)	47676	6.00	25694	6.12	2183834	16.55	1070773	20.42
Mexico	498181	62.71	255510	60.84	2199221	16.67	1270246	24.23
Asia	117516	14.79	94117	22.41	2539777	19.25	1763129	33.63
Can.,Eur. & USSR	117863	14.84	34520	8.22	5992431	45.42	967938	18.46
Other	2534	0.32	1474	0.35	78896	0.60	41263	0.79

Table refers to foreign born who reported country of birth.

TABLE 2.5

LEADING COUNTRIES OF ORIGIN OF FOREIGN BORN IN TEXAS: 1980

Country	Foreign Born Living in Texas, 1980 Number	Proportion
All Countries Reported	794434	100.00
Leading Countries	644846	82.44
Mexico	498181	62.71
Germany	34419	4.33
Vietnam	24793	3.12
United Kingdom	22389	2.82
Canada	17409	2.19
India	13905	1.75
Korea	11562	1.46
Philippines	11553	1.45
China & Hong Kong	10635	1.34
Cuba	10103	1.27

TABLE 2.6

DEMOGRAPHIC CHARACTERISTICS OF THE POPULATION OF TEXAS BY SELECTED PLACES OF BIRTH: 1980.

Characteristic	Foreign Born Immigrated 1970-1980				Native-Born
	Mexico	Vietnam (1975-80)	United Kingdom	Canada	Living in Texas
Number of Persons	255510	22856	8194	6461	13372978
Median Age	24.1	22.6	29.4	25.4	27.8
Percent 15-44 years	68.21	58.75	65.38	60.42	47.15
Percent 45 years+	8.51	11.26	11.12	11.48	27.39
Males per 100 Females (sex ratio)	117.55	120.47	81.40	96.17	96.79
Sex ratio of Population 15 yrs+	121.14	122.55	73.34	89.48	94.26
Persons per Family	4.47	4.72	3.39	3.21	3.28
Children Ever Born per 1000 Females 35-44	4359	4127	1993	2033	2732
Percent of Family Households w/ no Husband Present	8.94	10.28	5.76	5.90	12.28

TABLE 2.7

SOCIAL AND ECONOMIC CHARACTERISTICS OF THE POPULATION OF TEXAS BY SELECTED PLACES OF BIRTH: 1980.

Characteristic	Foreign Born Immigrated 1970-1980				Native-Born
	Mexico	Vietnam (1975-80)	United Kingdom	Canada	Living in Texas
Number of Persons	255510	22856	8194	6461	13372978
Percent of Population 25+ Who Have Completed High School	15.7	61.5	89.8	84.3	64.3
4+ Yrs of Coll.	2.9	11.5	27.3	37.0	17.2
Percent of Population 5+ Who Speak English "Not well" or "Not at all"	63.09	39.10	0.40	0.51	2.13
Percent of Employed Persons 16+ in Managerial, Prof., Specialty Occs.	3.53	9.29	44.73	52.55	22.05
Technical, Sales Admin. Suppt.	7.99	25.91	31.77	25.50	32.22
Farming, Forestry & Fishing	7.80	0.62	0.46	0.72	2.72
Operators, Fabricators & Laborers	42.35	33.39	7.33	6.16	16.37
Production, Craft	22.13	19.62	6.90	7.95	14.98
Service Occs.	16.20	11.17	8.81	7.12	11.66
Median Family Income	10253	15562	27908	29545	20109
Percent of Families Below Poverty Level	37.4	30.3	4.4	6.2	10.0
Percent of Family Households w/ no Husband Present, Below Poverty Level	63.08	47.41	36.46	24.39	29.73

TABLE 2.8

DEMOGRAPHIC CHARACTERISTICS OF ETHNIC GROUPS FOR TEXAS: 1980.

Characteristic	Total	Anglo	Black	Asian & Other	Hispanic
Number of Persons	14229191	9370023	1688947	187638	2982583
Median Age	28.2	31.0	24.7	26.9	22.1
Percent 15-44 years	47.9	47.5	48.2	58.0	48.2
Percent 45 years+	27.4	31.6	23.2	15.5	17.5
Males per 100 Females (sex ratio)	96.79	96.70	92.67	101.69	99.20
Sex ratio of Population 15 yrs+	94.44	94.49	89.36	100.48	97.08
Number of Family Households	3696656	2605171	394800	41583	655102
Persons per Family	3.33	3.07	3.66	3.53	4.16
Children Ever Born per 1000 Females 35-44	2785	2456	3316	2666	3707
Percent of Family Households w/ no Husband Present	12.35	8.90	30.97	10.29	15.00

TABLE 2.9

SOCIAL AND ECONOMIC CHARACTERISTICS OF ETHNIC GROUPS FOR TEXAS: 1980.

Characteristic	Total	Anglo	Black	Asian & Other	Hispanic
Number of Persons	14229191	9370023	1688947	187638	2982583
Percent of Population 25+ Who Have Completed High School	62.6	70.1	53.1	68.7	35.5
4+ Yrs of Coll.	16.88	20.35	9.15	31.34	5.61
Percent of Employed Persons 16+ in:					
Managerial, Prof., Specialty Occs.	21.67	25.66	11.90	28.10	10.74
Technical, Sales Admin. Suppt.	31.44	34.33	23.65	27.78	24.55
Farming, Forestry & Fishing	2.85	2.74	1.59	0.97	4.23
Operators, Fabricators & Laborers	17.07	13.11	26.91	17.88	27.28
Production, Craft	15.07	15.28	10.75	11.79	17.13
Service Occs.	11.90	8.88	25.20	13.48	16.07
Median Family Income	19618	22162	13064	19994	13293
Percent of Families Below Poverty Level	11.1	5.7	24.1	14.7	24.7
Percent of Family Households w/ no Husband Present, Below Poverty Level	30.74	16.48	44.30	35.56	47.27

Notes - Chapter II

1. Skrabanek, R.L., "Texas Population in the Year 2000," Texas Agricultural Progress Summer, 1979, p. 1.

2. Frisbie, op. cit., p.6.

3. Passell, Jeffrey S., "Statement Before the Subcommittee on Census and Population," U.S. House of Representatives, July 19, 1985.

4. Reinhold, Robert. "Texans' Lone Star has Lost Some Sparkle," The Virginian Pilot, July 20, 1986, p. E-5.

5. Frisbie, op. cit, p. 14.

Chapter III

The Ethnic Composition of Texas: 1985-2035

Our review of the ethnic composition of the state of Texas in Chapter II showed a growing proportion of minorities in recent decades. Given continued high levels of immigration from Latin America and Asia and given the very low fertility currently exhibited by the resident population of the state, the proportion of Texans who are minorities will undoubtedly continue to expand in future years. This chapter looks at this question and develops projections for the four major ethnic groups: Anglo, Hispanic, Black and Asian.

Anglos, or more correctly Non-Hispanic Whites, comprise all those persons who indicated their race to be White in the 1980 census less those who identified themselves as Hispanic. Similarly, Blacks and Asians include all members of those groups minus those who stated they were Hispanic. Hispanics consist of all who stated that they were of that ethnic background. The category, "Other," added to the Asian group for simplification, includes Native Americans and those who did not indicate any ethnic identity. Thus, in this study, Texans are either Anglo, Hispanic, Black, or Asian or Other.

These are not ideal ethnic categories. As noted earlier, Anglo is misleading. Hispanic is a hybrid concept which includes persons of White, Black, Native Continental-American, and even Asian background. As most Hispanics in Texas are Mexican this confusion is less pronounced than it might be elsewhere. Asian does not mean anyone coming from that continent. It is limited to Pakistan and all Asian countries east of Pakistan. Blacks include persons from Africa and Haiti and other Caribbean islands. Despite such numerous limitations, these four basic ethnic categories are utilized in this study. Each subgroup population was projected from the 1980 census count to 1985 and this serves as the base for the projections to 2035.

In 1985, 63 percent of the population of Texas was Anglo compared to 22.7 percent Hispanic, 12.5 percent Black and 1.8 percent Asian and other. (See Table 3.1) Significant shifts can be expected in future years the result of variations in demographic behavior. Relying on the moderate immigration assumptions of Scenario B, by 2000 Anglos will represent but 55.5 percent of the population while the proportion Hispanic will grow to 28.9 percent and that of Asians and others to 3.4 percent. Blacks will fall slightly to 12.2 percent.

By about 2015, no ethnic group will claim a majority of the state's population. In 2035, Anglos will represent 43.4 percent of all Texans; Hispanics 39.3 percent; Blacks 10.9 percent; Asians and others 6.4 percent. Numerical rather than proportional changes best illustrate these remarkable shifts. Anglos numbered 10.4 million in 1985; by 2035 they will total 13.1 million or a gain of 28 percent over fifty years. In contrast, Hispanics will increase their numbers 220 percent, from 3.7 to almost 12 million. Asians will grow more than five-fold, while Blacks will gain by only 63 percent.

Only California will experience a more dramatic shift in ethnic distribution over the next few decades. There, the point in time where no majority exists will come by 2010 and by 2030, the number of Anglos and Hispanics will be approximately equal.(1)

Irrespective of ethnic status, how many post-1985 immigrants and their descendants will there be in Texas in future years? By first examining the data from Projection Model A (No Immigration Scenario) and then comparing these to Scenario B, the answer can be ascertained. Table 3.2 indicates the future population of the state assuming continued domestic migration but no immigration whatsoever.

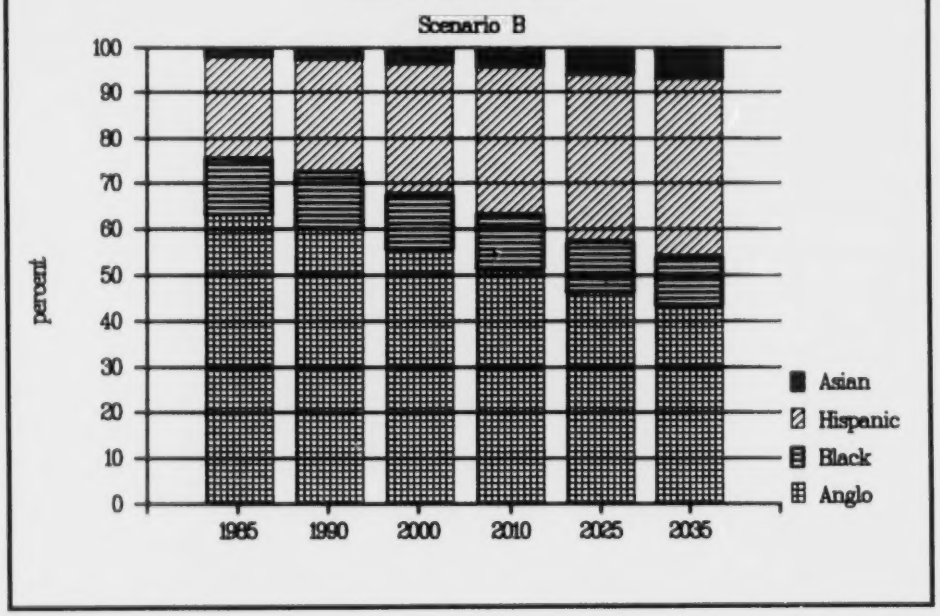
Without any immigration,, Texans would number over 19.4 million by the turn of the century, and would approach 24 million 35 years later. Interestingly, the proportion Anglo would still decline despite continued internal migration of 40,000 per year. On the other hand, the representation of all other ethnic groups would increase. Hispanics, for example, would see their share grow from 22.7 to 29 percent by 2035. This surprising shift can be explained by the higher, though falling, fertility of all the non-Anglo groups and by the young age composition particularly of Hispanics and Asians. As will be noted in more detail in a later chapter, there is a built-in momentum for growth in a young population and both the Hispanics and Asians, and the Blacks to a lesser degree, have large proportions of youth in their populations.

The proportion of post-1985 immigrants and their descendants will increase over time. (Table 3.3) This is to be expected given the larger number of immigrants than in-migrants and given the lower fertility of the resident group. By the year 2000, about 7 percent of the Texas population will consist of persons who immigrated since 1985 and their descendants. These will be predominantly foreign-born. By 2025, the proportion of post-1985 immigrants and their descendants will reach 17 percent and will approach 21 percent by 2035. Many of these people will be second and even third generation Texans. Thus even in the presence of the possibly successful assimilation of minority ethnic groups into mainstream American society, a significant proportion of newcomers will be present given a continuation of immigration streams at the level assumed under the B model.

Model C, "High Immigration", yields a vastly different picture of the future population of Texas. Not only would growth occur much more rapidly, but changes in ethnic proportions would be dramatic. (Table 3.4) By the turn of the century Anglos would constitute just half of the state's population and would be less than a third 35 years later. On the other hand, the Hispanic share would grow to 36 percent by the year 2000 and 54 percent by 2025. From 3.7 million in 1985, their numbers would rise to 8.2 million in 2000 and 22 million in 2035. Soon after 2010, Hispanics would outnumber Anglos. Blacks would see their proportion diminish from 12.5 to 8.3 percent over the fifty-year period though their numbers would increase from 2 to 3.4 million. Asians would increase proportionally: 1.8 to 4,7 percent in 2035.

Fig. 31

Projected Population of Texas by Ethnic Group: Texas, 1985–2035



The percent either foreign-born or the descendants of immigrants coming after 1985 would be very high, reaching 57 percent in 2000. Thirty-five years later more than two-thirds of the Texas population would consist of those who either immigrated after 1985 or the descendants of such people.

Immigration of 165,000 Hispanics every year between 1985 and 2035 may appear to be quite high. Yet this assumption is not unrealistic given the rapid increase in the size of the labor force of Mexico and the economic conditions in that country. (2) This topic will be discussed in Chapter IX. Should these assumptions prove to be even remotely close to reality, Texas would be vastly different in the 21st century than it is today.

The next 50 years will see significant changes in the ethnic composition of the state of Texas. To be sure, among residents of Texas, the concept, "Texan", has always included a sigificant minority of Mexicans and Blacks. Indeed, some Mexicans fought on the side of Texas in its war of independence. Blacks, too, have increasingly identified themselves proudly as Texans, particularly with the demise of segregation.

Texas has always had many white ethnic groups. As Texas author, Mark Perkins, has commented: "Perhaps the truth is that the stock in the Texas melting pot is not as lumpy with ethnicity as it once was, but neither are we a watery bouillon. For white ethnics, languages and cultures may have almost disappeared, but people within the groups still identify themselves as Italian or Czech or Norwegian, as though belonging to an extended family. People are simply disinclined to let their ethnic past be forgotten."(3)

Yet, to the rest of the nation, a male Texan is still stereotyped as a tall, lean Anglo-American wearing a ten gallon hat; a female Texan is thought to be beautiful, prim, dainty, and, of course, Anglo. These incorrect stereotypes are bound to change given the shifts in ethnic composition that will occur over the next few decades, irrespective of the scenario selected. The challenges posed by a situation where no ethnic group predominates numerically will be discussed in forthcoming chapters.

Fig. 32

Projected Population of Texas by Ethnic Group: Texas, 1985–2035

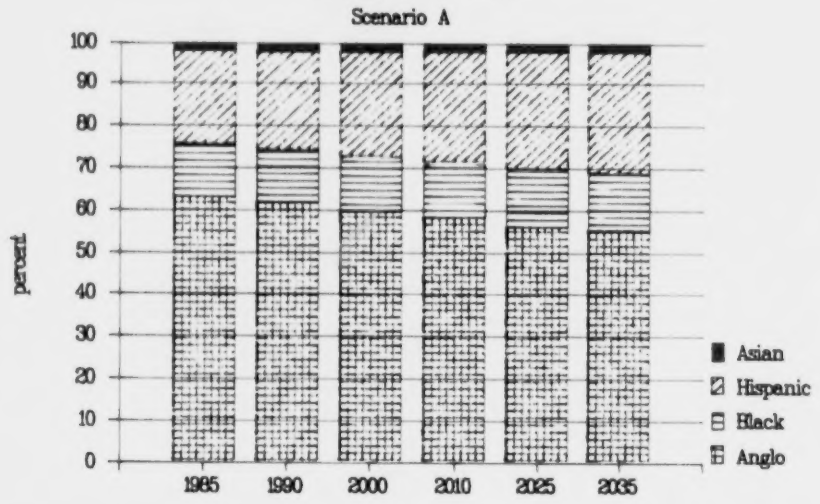


Fig. 33

Projected Population of Texas by Ethnic Group: Texas, 1985–2035

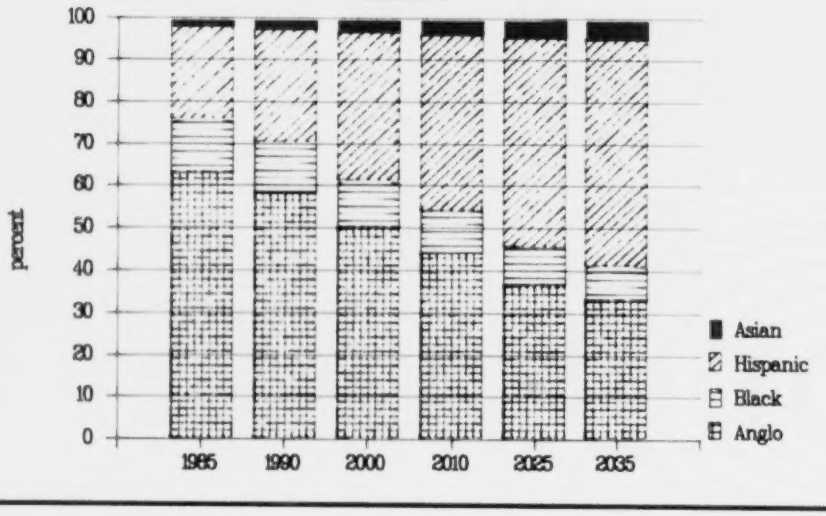


TABLE 3.1

PROJECTED POPULATION OF TEXAS, BY ETHNIC GROUP: 1985-2035
(Scenario B; population in thousands)

Ethnic Group	Year					
	1985	1990	2000	2010	2025	2035
Anglo	10384	10837	11582	12234	12979	13133
	(63.0)	(60.4)	(55.5)	(51.4)	(46.3)	(43.4)
Black	2057	2227	2540	2830	3180	3303
	(12.5)	(12.4)	(12.2)	(11.9)	(11.3)	(10.9)
Hispanic	3732	4453	6020	7678	10296	11877
	(22.7)	(24.8)	(28.9)	(32.3)	(36.8)	(39.3)
Asian &	305	434	721	1040	1568	1921
Other	(1.8)	(2.4)	(3.4)	(4.4)	(5.6)	(6.4)
Total	16478	17950	20863	23782	28027	30234
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)

TABLE 3.2

PROJECTED POPULATION OF TEXAS, BY ETHNIC GROUP: 1985-2035
(Scenario A; population in thousands)

Ethnic Group	Year					
	1985	1990	2000	2010	2025	2035
Anglo	10384	10837	11582	12234	12979	13133
	(63.0)	(61.8)	(59.6)	(58.0)	(55.9)	(55.0)
Black	2057	2227	2540	2830	3180	3303
	(12.5)	(12.7)	(13.1)	(13.4)	(13.7)	(13.8)
Hispanic	3732	4143	4910	5619	6564	6939
	(22.7)	(23.6)	(25.3)	(26.6)	(28.3)	(29.1)
Asian &	305	338	387	433	489	505
Other	(1.8)	(1.9)	(2.0)	(2.0)	(2.1)	(2.1)
Total	16478	17544	19420	21116	23212	23879
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)

TABLE 3.3

PERCENT POST-1985 IMMIGRANTS AND DESCENDANTS IN FUTURE POPULATION OF TEXAS
(Scenario B)

Ethnic Group	Year				
	1990	2000	2010	2025	2035
Hispanic	7.0	18.4	26.8	36.2	41.5
Asian	22.1	46.3	58.3	68.8	73.6
Total	2.3	6.9	11.2	17.1	20.9

TABLE 3.4

PROJECTED POPULATION OF TEXAS, BY ETHNIC GROUP: 1985-2035
(Scenario C; population in thousands)

Ethnic Group	Year					
	1985	1990	2000	2010	2025	2035
Anglo	10384	10839	11601	12287	13125	13360
	(63.0)	(58.4)	(50.2)	(43.9)	(36.7)	(32.9)
Black	2057	2227	2544	2840	3213	3360
	(12.5)	(12.0)	(11.0)	(10.1)	(9.0)	(8.3)
Hispanic	3732	5073	8246	11822	17866	21968
	(22.7)	(27.3)	(35.8)	(42.2)	(49.9)	(54.1)
Asian &	305	434	722	1042	1578	1941
Other	(1.8)	(2.3)	(3.0)	(3.8)	(4.4)	(4.7)
Total	16478	18573	23113	27991	35783	40628
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)

Notes - Chapter III

1. Bouvier, Leon F., and Philip Martin, Population Change and California's Future. Population Reference Bureau, Washington, DC, 1985.

2. Merrick, Thomas W., "Population Pressures in Latin America," Population Bulletin, vol. 41, no. 3, Population Reference Bureau, Washington, DC, 1986.

3. Perkins, Mark, "Texas Ethnics and the Melting Pot," Texas Celebrates! The First 150 Years, Dallas, TX., 1985, p. 158.

Chapter IV

Changing Age Composition in Texas

Variations in fertility, mortality and migration contribute to variations in size. In Texas, these will result in an increasingly diverse population. Demographic fluctuations also contribute to shifts in the age distribution of the population. Rapid growth may receive more attention; but shifts in age composition can be as important for many sectors of the society.

Demographers speak of "young" and "old" societies. Young societies have large proportions of people under 15 and median ages as low as 20 or 25; in contrast, old societies have large proportions of people 65 and older and median ages in the middle to upper 30s. How does the process of "aging" or "younging" take place?

Contrary to what might be expected, increasing longevity does not necessarily result in an aging of the society. The major factor in that process is declining fertility. Nations with low fertility have small proportions of their populations in the younger age groups. It is only when fertility has been very low for many years that improvements in life expectancy among the elderly contribute to a slight aging of a society. Younging, on the other hand, results from high fertility. High fertility nations have large proportions under age 15. As we will see, even within a state like Texas, age variations are present among the ethnic groups reflecting different levels of past and current fertility.

Radical shifts in demographic behavior, particularly fertility and migration, can also affect the age of a society. The baby boom and baby bust generations are prime examples. As these two groups pass through their respective stages of the life cycle they either lower or raise the median age, depending on the stage through which they are passing. This will continue until they cease to exist. Their impact on the future age composition of Texas will be discussed below.

Similarly, migration streams can alter the age composition of both sending and receiving areas. Movements of young adults out of the Great Plains region contributed to an increase in the elderly proportion of the population in the Dakotas and elsewhere while it resulted in a slight "younging" of the urban areas where they migrated. On the other hand, movements of elderly to retirement areas result in a massive increase in their proportion in places like St. Petersburg, Florida. Net migration into Texas will also affect its age composition, as will be noted later.

The concept of population momentum was introduced earlier. A relatively young population has a built-in momentum for growth because it has been exhibiting high rates of fertility. Even if the fertility rate is reduced to replacement level or lower, numbers will continue to increase for a few decades (even in the absence of migration). This reflects the fact that, while the number of births per woman may be very low, the number of women having children is large as they are part of that earlier high fertility generation. A younger population will exhibit a faster rate of growth than an older population. Demographer Ernest B. Attah has shown that even if American Blacks and Whites had exactly the same fertility and mortality rates, the proportion Black would increase for some 50 years simply because the Black ethnic group is younger.(1) The importance of population momentum has been demonstrated in the A Scenario projection in which the Hispanic population increases, in comparison to the Anglo, despite there being no immigration.

In 1985 Texas' population was slightly younger than the nation's. Almost one-quarter were under 15 while just under 9 percent were 65 or older. This compares to the nation's 22 percent and 11 percent respectively. The long term impact of migration, both domestic and international, accounts for this difference. Migrants tend to be young adults and this lowers the overall median age of the receiving area's population.

Little change in age composition will occur before the end of this century. After 2000, however, a clear aging process will get underway. By 2010, the proportion under 15 will be down to 21.6 while the age group 65 and older will approach 9.1. Only after 2020 will the aging of the baby boom really affect the state and by 2035, 15.8 percent of all Texans will be elderly while less than 20 percent will be under 15. Over the 50 year period, the median age will climb from about 28.5 to 36.6. (Table 4.1)

University of Texas economists Arnold and Renfro have written: "In spite of the maturing of the Texas population over the next quarter century, the state population will still remain much younger than that of the United States as a whole."(2) Even in 2035 Texas should still be younger than the nation given a continuation of migration. According to Census Bureau projections, by that year 27 percent of the nation's population will be 65 or over and 17.5 percent will be under 15. The nation's median age will be 41.4.

Ethnic differences in age composition are quite substantial. Anglos are much "older" than are any of the other groups. Asians are next, followed by Blacks and Hispanics. Respective median ages are approximately 32.1; 27.5; 26.2; 24.1. In 1985 only about 4 percent of Asians and Hispanics were elderly while some 30 percent were under 15. In general, Blacks are intermediate between Anglos, on one hand, and Hispanics and Asians,

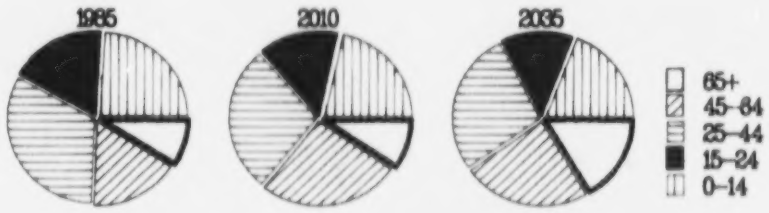
on the other. Such variations will affect the future growth as well as the aging process of these groups. (Table 4.2)

All four ethnic groups will age but at different paces. By 2035, about one in five Anglos and Blacks will be 65 or over. In that same year, just over one in ten Hispanics and Asians will be that age. At the other extreme of the life cycle, only about 16 percent of the Anglos and Blacks will be youths under age 15 in contrast to about 23 percent of Asians and Hispanics.

The effect of the baby boom and baby bust are notable, particularly for Anglos and Blacks. For example, the proportion 45-64 will peak in 2010 as this is the cohort born during the baby boom years of 1945-1965. This will not be true of Hispanics and Asians who will be more directly affected by immigration. The proportion between 15 and 24 drops precipitously by 1990 for all groups except the Asians as this is the baby bust cohort born after 1965. The Asian 1985 population was too small to be affected by this demographic phenomenon. Finally, when the baby boom generation reaches retirement around 2025, the proportion elderly will soar among Anglos and Blacks, but less so for Hispanics and Asians whose aging process will be tempered by the continued immigration of younger people.

Fig. 4.1

Age Distribution of the Population of Texas: 1985, 2010, 2035



Source: Table 4.1

The age composition projections have been limited to an analysis of Scenario B. Should immigration levels be significantly higher, the aging process will be retarded but will not be

eliminated. Any reduction in immigration, as under Scenario A, would lead to an even older population in the 21st century.

The population of Texas will age in future years but this will be more accentuated among Anglos and Blacks than among Hispanics and Asians. As a result, each age category will be affected differently. We have noted that the Anglo proportion of the total population will drop from 63 percent in 1985 to 43.4 percent in 2035. Other groups will see their proportions enlarge, particularly Hispanics and Asians. But what about the ethnic distributions within age categories? The data described in Table 4.3 yield fascinating information on this important aspect of the study.

Among children under age 15, Anglos will cease being a majority before the turn of the century. Within 10 years (1995) they will comprise but 48 percent of the under age 15 population of Texas. By 2015 young Hispanics will equal Anglos in numbers. Both, Blacks and Anglos will see their proportions diminish in future years while that of Hispanics and Asians will grow.

A similar, though not as dramatic shift will occur among those between the ages of 15 and 24. Anglos will no longer be the majority by 2005 and Hispanics will equal them in numbers by 2020. Again, both Blacks and Anglos will have reduced shares of the total population in future years.

Only among those aged 45 and older will the Anglos maintain their majority status until after 2025. However their proportion of the total population will fall. By 2035, about 55 percent of all elderly Texans will be Anglos while 27.8 percent will be Hispanic, 12.7 percent Black and 4.2 percent Asian.

These age proportion projections are based on Scenario B. Any higher level of immigration will simply accelerate the process of diversity even more.

Texas is becoming increasingly heterogeneous at the same time that it is aging. Drastic shifts in the ethnic composition of the various age groups are the result. What this portends for the various sectors of the society will be discussed in the following chapters.

TABLE 4.1

PERCENT DISTRIBUTION OF THE POPULATION OF TEXAS BY AGE: 1985-2035

Age Group	Year					
	1985	1990	2000	2010	2025	2035
0-14	24.0	24.1	23.3	21.5	20.4	19.2
15-24	17.8	15.4	14.5	14.7	13.4	13.4
25-44	32.6	34.7	32.2	28.1	28.0	27.3
45-64	16.7	16.9	21.2	26.2	23.8	23.7
65+	8.9	8.9	8.8	9.5	14.4	16.4
Total	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 4.2

PERCENT DISTRIBUTION OF ETHNIC GROUPS BY AGE: TEXAS, 1985-2035

Ethnicity and Age	Year					
	1985	1990	2000	2010	2025	2035
Anglo	100.0	100.0	100.0	100.0	100.0	100.0
0-14	20.9	20.9	19.2	17.5	16.8	16.4
15-24	16.0	13.8	13.5	13.1	11.7	11.8
25-44	33.1	34.7	31.2	27.2	26.5	25.3
45-64	19.0	19.4	24.7	30.0	25.8	25.6
65+	11.0	11.2	11.4	12.2	19.2	20.9
Black	100.0	100.0	100.0	100.0	100.0	100.0
0-14	26.0	24.3	22.8	20.1	17.9	16.7
15-24	20.7	16.9	15.2	14.7	12.6	12.3
25-44	32.2	36.2	34.8	29.4	27.9	26.4
45-64	14.0	14.6	20.2	27.9	26.3	25.5
65+	7.1	8.0	7.0	7.9	15.3	19.1
Hispanic	100.0	100.0	100.0	100.0	100.0	100.0
0-14	31.7	31.2	30.8	27.7	24.7	22.2
15-24	21.3	18.4	15.9	17.3	15.5	15.1
25-44	30.7	33.9	33.3	29.6	29.7	29.4
45-64	12.2	12.2	15.3	20.4	21.2	21.4
65+	4.1	4.3	4.7	5.0	8.9	11.9
Asian & Other	100.0	100.0	100.0	100.0	100.0	100.0
0-14	27.3	28.4	29.4	27.8	25.7	23.5
15-24	17.1	16.1	15.0	16.4	15.7	15.6
25-44	37.7	35.5	30.7	28.3	28.9	29.0
45-64	13.9	15.6	19.4	20.6	19.7	20.8
65+	4.0	4.4	5.5	6.9	10.0	11.1

TABLE 4.3

PERCENT DISTRIBUTION OF AGE GROUPS BY ETHNICITY: TEXAS, 1985-2035

Ethnicity and Age	Year					
	1985	1990	2000	2010	2025	2035
0-14						
Anglo	(54.7)	(51.6)	(45.7)	(41.8)	(38.4)	(37.3)
Black	(13.5)	(13.2)	(11.9)	(11.1)	(10.1)	(9.5)
Hispanic	(29.7)	(32.3)	(38.1)	(41.5)	(44.5)	(45.4)
Asian + O	(2.1)	(2.9)	(4.3)	(5.6)	(7.0)	(7.8)
Total	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
15-24						
Anglo	(56.7)	(54.2)	(51.9)	(45.7)	(40.5)	(38.4)
Black	(14.5)	(13.6)	(12.7)	(11.8)	(10.6)	(10.0)
Hispanic	(27.0)	(29.7)	(31.8)	(37.6)	(42.3)	(44.2)
Asian + O	(1.8)	(2.5)	(3.6)	(4.9)	(6.6)	(7.4)
Total	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
25-44						
Anglo	(64.0)	(60.4)	(53.8)	(49.5)	(43.9)	(40.3)
Black	(12.4)	(12.9)	(13.2)	(12.4)	(11.4)	(10.6)
Hispanic	(21.4)	(24.3)	(29.8)	(33.7)	(39.0)	(42.3)
Asian + O	(2.2)	(2.4)	(3.2)	(4.4)	(5.7)	(6.8)
Total	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
45-64						
Anglo	(71.6)	(69.2)	(64.5)	(58.8)	(50.2)	(47.1)
Black	(10.4)	(10.7)	(11.5)	(12.7)	(12.6)	(11.8)
Hispanic	(16.4)	(17.9)	(20.8)	(25.1)	(32.6)	(35.5)
Asian + O	(1.6)	(2.2)	(3.2)	(3.4)	(4.6)	(5.6)
Total	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
65 +						
Anglo	(77.9)	(76.8)	(72.7)	(68.5)	(61.6)	(55.3)
Black	(10.1)	(9.7)	(9.9)	(10.4)	(11.9)	(12.7)
Hispanic	(11.0)	(12.2)	(15.2)	(17.8)	(22.7)	(27.8)
Asian + O	(1.0)	(1.3)	(2.2)	(3.3)	(3.8)	(4.2)
Total	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)

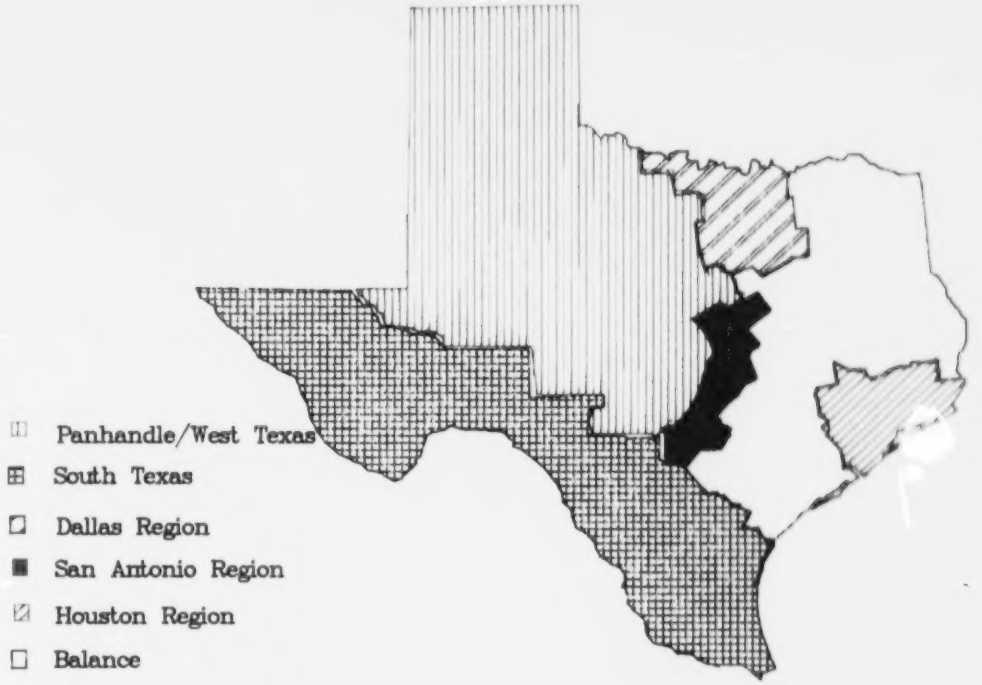
Notes - Chapter IV

1. Attah, Ernest B., "Racial Aspects of Zero Population Growth," Science, June 15, 1973, p. 1145.

2. Arnold, Victor L., and Bruce Renfro, "Forecasting Future Growth," Discovery: Research and Scholarship at the University of Texas at Austin, vol. 9, no. 2, 1986.

Figure 51

The Six Regions of Texas



Chapter V

Regional Distribution of the Population

Projections of the population of Texas for the next 50 years are quite tenuous; attempting regional projections by ethnicity for the same length of time borders on fiction. As Frisbie recently commented regarding 50 year projected trends in Hispanic Anglo ethnic relations: "Anyone who speculates on what the future holds is well-advised to concentrate on dates as far removed from the present as possible, since the longer the prognostication interval, the fewer the number of critics who will remember and point out errent predictions."(1) Nevertheless, such an attempt is appropriate to this study.

We have arbitrarily divided the state into six sections: Houston region; Dallas region; San Antonio region; South Texas; Panhandle/West Texas (referred to as West Texas for brevity) and the balance of the state, primarily in East Texas. The Houston region includes the Houston SCA (Standard Consolidated Area), the Beaumont-Port Arthur-Orange SMSA, and Chambers county. The Dallas region includes the Dallas-Fort Worth SMSA, the Wichita Falls SMSA, the Sherman-Denison SMSA, Montague and Cooke counties; the San Antonio region includes the SMSAs of San Antonio, Austin, Killeen-Temple and Waco. South Texas covers all 38 counties south and east of the Pecos River and from El Paso to Brownsville including Corpus Christi. West Texas includes 109 counties in that part of the state and the panhandle. Figure 5.1 illustrates these.

The 1980 population for the six regions is noted in Table 5.1. The Houston and Dallas regions together include close to half the total for the state and the San Antonio region comprises 14 percent, South Texas 13 percent, West Texas 12 percent and the balance 14 percent of the state's population.

In 1980 the six regions differed considerably from one another on many variables. (Table 5.2) For example, while only 8 percent of the Dallas region population was Hispanic, two-thirds of that of South Texas was Hispanic. Close to 19 percent of the Houston region was Black compared to 10 percent in San Antonio. East Texas (i.e the balance of the state) and West Texas were fairly similar on ethnic distribution, both being overwhelmingly Anglo. However the proportion Black was considerably larger in the eastern part of the state.

A few selected socioeconomic variables have been chosen to illustrate the substantial differences among the regions of the state. Houston, Dallas and San Antonio regions which

include the three largest metropolitan areas have the highest proportions of highly educated residents. About one in five persons aged 25 and over had college degrees in those regions compared to just over one in ten elsewhere. A similar differential is noted for proportions completing high school.

Houston region had the highest median household income in 1980, $20,896, followed closely by Dallas region and somewhat further behind, San Antonio region. Incomes were considerably lower in those regions without large metropolitan centers, that is, South and West Texas and the balance of the state. The median household income in South Texas was only $13,343.

As might be expected from these data, residents of the Houston, Dallas and San Antonio regions were more likely to be employed in white collar occupations than their less urban counterparts in other parts of the state- 55 percent compared to 45 percent. The highest proportion of working mothers was found in Dallas region and the lowest in South Texas.

Vast differences exist among the regions of the state on a number of social, economic and ethnic variables. These must be taken into consideration as we peer into the future of these regions as well as the state itself.

Small area projections, such as projecting the population of metropolitan areas, generally emphasize the effect of migration. However, determining intercensal movements between counties is complex and making assumptions concerning future movements is hazardous, to say the least. Houston's recent experience attests to the fact that migration rates can shift very rapidly. Houston's migration rate declined from 8.47 percent for 1980-82 to only 0.13 percent from 1982-84.(2)

The Census Bureau prepares county level projections that assume a continuation of recent migration trends (for example, 1975-1980). This can lead to peculiar conclusions as a continued rate of out-migration can result in too rapid numerical decline so that a region soon reaches an incredibly small population, or a continued rate of in-migration can lead to a population size totally implausible given density limitations of the area under analysis.

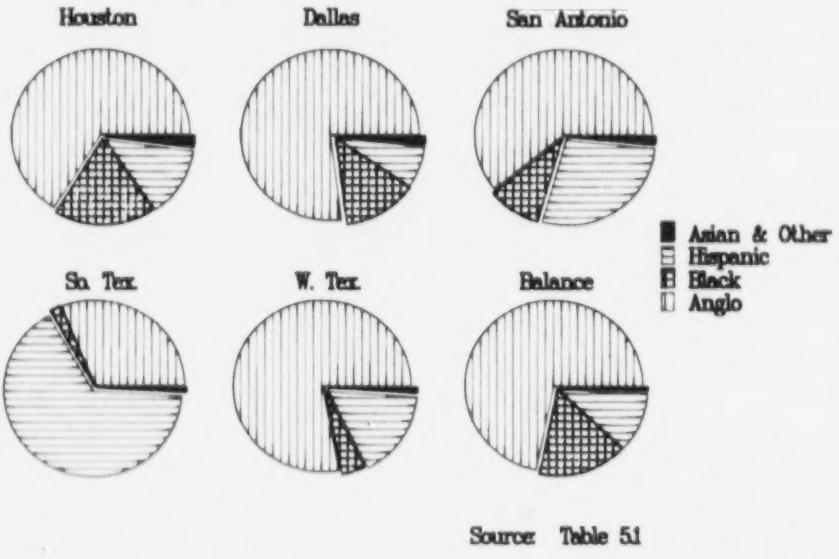
Our regional projections emphasize ethnic concentrations based on the fact that such groups tend to congregate in similar areas. First, the 1980 regional distribution of Anglos, Blacks, Hispanics, and Asians and Others was determined. For example, 40.7 percent of all Hispanics lived in South Texas, 17.8 in San Antonio region, 15.5 in Houston region, 8.7 in Dallas region, 9.7 in West Texas and 7.6 percent elsewhere in the state. It was then assumed that the 1985 residents and descendants in each ethnic group would be similarly distributed.

Thus, of the 11.8 million resident and descendant Hispanic Texans in 2035, 40.7 percent or 4.5 million are allocated to South Texas etc.

For post-1985 Hispanic immigrants and their descendants we relied on the most recent data from Immigration and Naturalization Service which indicates where new immigrants plan to live after coming to the state. Data on intended residence of new immigrants are available by three-digit zip codes and from this source rounded estimates were made as to future residence patterns. We allocated post-1985 Hispanic immigrants and their descendants as follows: South Texas 35 percent; San Antonio region 22; Houston region 15; Dallas region 12; balance of state 16 percent. We followed a similar procedure for post-1980 Asian immigrants and their descendants.

Fig. 5.2

Ethnic Distribution of Regional Populations of Texas: 1980



Source: Table 5.1

Admittedly, such a method is subject to criticism. Yet we find no alternative approach that appears more reliable for a 50 year period. We take the state level projections by ethnicity and ask: where will the 30 million Texans of 2035 be living?

Given the continued urbanization of the state, the projections for South and West Texas may prove somewhat exaggerated while those for the metropolitan areas may be on the low side. However, between 1980 and 1984, South Texas grew proportionally more than some of its neighboring regions.

Many questions cannot be answered. Will urbanization continue or will rural areas witness a revival? As the Hispanic population grows will it spread further away from South Texas rather than settle in that region? Will Houston once again become a magnet for migrants or will El Paso become increasingly attractive in future years? No answers are available; yet these show the difficulty in making projections for substate regions.

The population of Houston region will almost double over the next 50 years reaching 7 million. (Table 5.3) The Dallas region will experience equally rapid growth going from 3.7 to over 6 million over that same period. However the most substantial gains will be in those areas where Hispanics predominate. This is to be expected given our methodology. San Antonio region will grow from 2.2 to 4.6 million; South Texas from 2.2 to 5.6 million. On the other hand, neither West Texas nor the balance of the state will double in size.

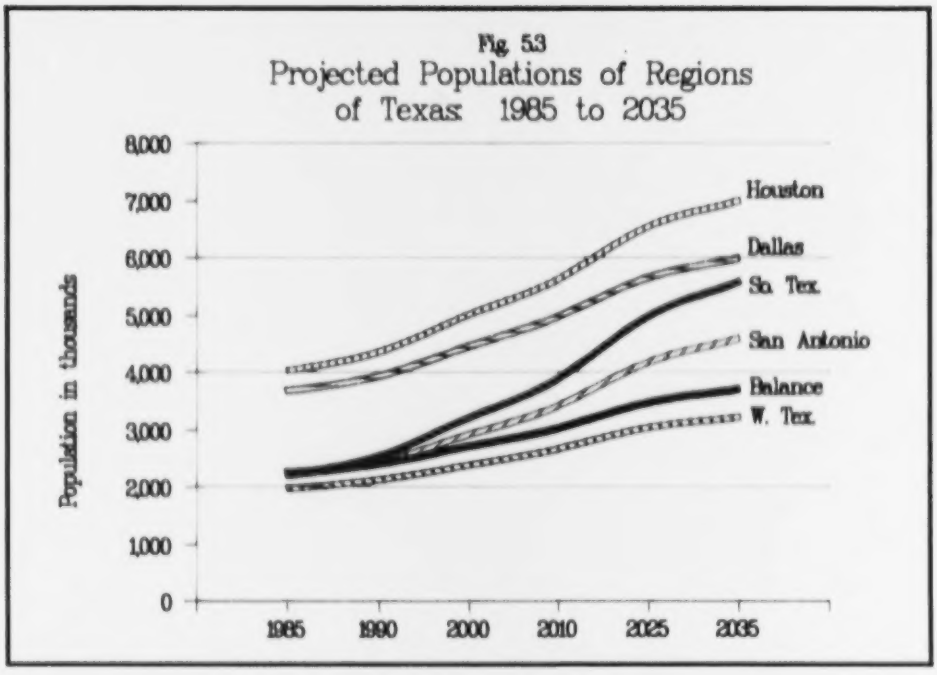
The growth of the Hispanic population is dramatically illustrated when examining regions. (Table 5.3) By 2025 Houston region will no longer have an ethnic majority and by 2035, Anglos will comprise 46 percent and Hispanics 26 percent of the population. The Asian proportion will climb to 10 percent while that of Blacks will drop slightly.

In Dallas region, Anglos will remain the majority but their proportion will fall sharply from 75 percent to 58 percent while that of Hispanics will more than double. Here too the Asian proportion will increase considerably while that of Blacks will remain constant.

San Antonio region will witness a marked shift in its ethnic proportions. In 1985, 58 percent were Anglos while 30 percent were Hispanic; by 2035, the respective shares will be 36 and 50 percent and Hispanics will form a majority of the total population of the region. The proportion Black will decline while that of Asians will increase.

The already significant proportion of Hispanics in South Texas will increase. Within 50 years, about 8 out of 10 residents of the region will be Hispanics. The proportion of Blacks and Asians will remain very small.

Fig. 53



Anglos will remain in the majority in West Texas as their proportion will stay well above 50 percent. However, here too the Hispanic share will climb as that of the Anglos declines.

The balance of the state which in fact represents East Texas minus the Houston region will exhibit a shift similar to that noted for West Texas. Anglos will remain in the majority but by smaller margins in future years.

These projections reflect the assumptions discussed above regarding ethnic distribution. The regional shifts will undoubtedly be in the direction indicated here. However, unexpected developments causing boom towns or depressed areas could seriously affect the distribution of people in future years. By 2035, 30 million Texans will be residing in the various regions of the state; thus all regions should show growth and Hispanic as well as Asian proportions should increase dramatically. It is not possible to project the socio-economic status of the region 50 years hence. One can only speculate as to whether South Texas, for example, will remain as undereducated and underemployed in the 21st century as it is today.

TABLE 5.1

POPULATION OF TEXAS REGIONS BY ETHNICITY: 1980.

Region	Anglo	Black	Hispanic	Asian	Total
Houston	2314599	643047	461700	75982	3495328
	(24.8)	(38.0)	(15.5)	(37.9)	(24.6)
Dallas	2497023	434812	259637	48859	3240331
	(26.7)	(25.7)	(8.7)	(24.4)	(22.8)
San Antonio	1166697	184130	532936	30290	1914053
	(12.5)	(10.9)	(17.8)	(15.1)	(13.5)
So. Texas	577453	35543	1215384	16035	1844415
	(6.2)	(2.1)	(40.7)	(8.0)	(13.0)
W. Texas	1365534	73776	289882	17401	1746593
	(14.6)	(4.4)	(9.7)	(8.6)	(12.3)
Balance	1428991	321234	226285	11961	1988471
	(15.2)	(18.9)	(7.6)	(6.0)	(14.0)
Total	9350297	1692542	2985824	200528	14229191
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)

TABLE 5.2

SOCIAL AND ECONOMIC CHARACTERISTICS OF REGIONAL POPULATIONS OF TEXAS: 1980

Characteristic	Region					
	Houston	Dallas	San Ant.	So. Texas	W. Texas	Balance
Percent Coll. Grad.	20.4	19.7	18.8	11.9	13.6	11.2
Percent H.S. Grad.	48.1	49.7	45.9	38.0	45.0	41.4
Median Household Income	20896	18785	15216	13343	15025	13795
Percent Blue Collar	31.0	29.5	26.9	31.2	32.0	37.1
Percent White Collar	54.4	55.8	54.2	44.7	45.2	41.1
Percent of Mothers Working	56.2	61.8	56.7	47.5	53.0	54.7
Percent Hispanic	13.2	8.0	27.8	65.9	16.6	11.4
Percent Black	18.4	13.4	9.6	1.9	4.2	16.2
Percent Asian	2.2	1.5	1.6	0.9	1.0	0.6
Percent Anglo	66.2	77.1	61.0	31.3	78.2	71.8

TABLE 5.3

PROJECTED POPULATION AND AGE DISTRIBUTION OF TEXAS REGIONS BY ETHNIC GROUP: 1985-2035
(population in thousands)

	1985	1990	2000	2010	2025	2035
Houston						
Anglo	2575.2	2687.6	2872.3	3034.0	3218.8	3257.0
	(63.6)	(61.3)	(57.1)	(53.6)	(49.0)	(46.4)
Black	781.7	846.3	965.2	1075.4	1208.4	1255.1
	(19.3)	(19.3)	(19.2)	(19.0)	(18.4)	(17.9)
Hispanic	578.5	688.7	927.6	1179.8	1577.2	1816.2
	(14.3)	(15.7)	(18.4)	(20.8)	(24.0)	(25.9)
Asian	115.6	161.7	263.6	376.6	563.0	687.0
	(2.9)	(3.7)	(5.2)	(6.6)	(8.6)	(9.8)
Total	4040.9	4384.2	5028.7	5665.8	6567.4	7015.4
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
Dallas						
Anglo	2772.5	2893.5	3092.4	3266.5	3465.4	3506.5
	(74.9)	(72.9)	(69.0)	(65.5)	(60.9)	(58.2)
Black	528.6	572.3	652.8	727.3	817.3	848.9
	(14.3)	(14.4)	(14.6)	(14.6)	(14.4)	(14.1)
Hispanic	324.7	397.6	560.4	735.9	1018.9	1196.3
	(8.8)	(10.0)	(12.5)	(14.8)	(17.9)	(19.8)
Asian	74.4	106.5	177.9	257.4	389.1	477.2
	(2.0)	(2.7)	(4.0)	(5.2)	(6.8)	(7.9)
Total	3700.3	3969.9	4483.5	4987.1	5690.6	6028.9
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
San Antonio						
Anglo	1298.0	1354.6	1447.8	1529.3	1622.4	1641.6
	(58.1)	(54.9)	(49.1)	(44.4)	(38.7)	(35.6)
Black	224.2	242.7	276.9	308.5	346.6	360.0
	(10.0)	(9.8)	(9.4)	(8.9)	(8.3)	(7.8)
Hispanic	664.3	805.7	1118.2	1453.2	1989.4	2321.5
	(29.8)	(32.6)	(37.9)	(42.2)	(47.4)	(50.3)
Asian	46.1	65.4	108.5	156.4	235.7	288.7
	(2.1)	(2.7)	(3.7)	(4.5)	(5.6)	(6.3)
Total	2232.6	2468.5	2951.3	3447.3	4194.1	4611.8
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)

TABLE 5.3 (continued)

South Texas						
Anglo	643.8	671.9	718.1	758.5	804.7	814.2
	(28.9)	(26.3)	(22.3)	(19.3)	(16.1)	(14.5)
Black	43.2	46.8	53.3	59.4	66.8	69.4
	(1.9)	(1.8)	(1.7)	(1.5)	(1.3)	(1.2)
Hispanic	1518.9	1794.7	2386.9	3007.6	3977.7	4552.5
	(68.1)	(70.4)	(74.1)	(76.7)	(79.6)	(81.0)
Asian	24.4	36.6	64.4	95.3	147.0	182.0
	(1.1)	(1.4)	(2.0)	(2.4)	(2.9)	(3.2)
Total	2230.3	2550.0	3222.7	3920.9	4996.2	5618.1
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
West Texas						
Anglo	1516.1	1582.2	1691.0	1786.2	1894.9	1917.4
	(76.0)	(73.9)	(69.9)	(66.4)	(61.8)	(59.1)
Black	90.5	98.0	111.8	124.5	139.9	145.3
	(4.5)	(4.6)	(4.6)	(4.6)	(4.6)	(4.5)
Hispanic	362.0	426.7	565.1	709.8	935.3	1068.1
	(18.1)	(19.9)	(23.4)	(26.4)	(30.5)	(32.9)
Asian	26.2	33.9	50.0	67.6	96.0	114.2
	(1.3)	(1.6)	(2.1)	(2.5)	(3.1)	(3.5)
Total	1994.8	2140.7	2417.8	2688.0	3066.1	3245.1
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
Balance						
Anglo	1578.4	1647.2	1760.5	1859.6	1972.8	1996.2
	(69.6)	(67.6)	(63.9)	(60.6)	(56.3)	(53.8)
Black	386.7	418.7	477.5	532.0	597.8	621.0
	(17.1)	(17.2)	(17.3)	(17.3)	(17.1)	(16.7)
Hispanic	283.6	339.7	462.0	591.8	797.4	922.4
	(12.5)	(13.9)	(16.8)	(19.3)	(22.7)	(24.9)
Asian	18.3	29.9	56.6	86.7	137.2	171.9
	(0.8)	(1.2)	(2.1)	(2.8)	(3.9)	(4.6)
Total	2267.0	2435.4	2756.6	3070.1	3505.3	3711.5
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)

Notes - Chapter V

1. Frisbie, W. Parker. Trends in Ethnic Relations: Hispanics and Anglos, Texas Population Research Center Papers, Series 8:1986, p. 1.

2. Murdock, Steve H., and Sean-Shong Hwang, "The Slowdown in Texas Population Growth: Post-1980 Population Change in Texas Counties," op. cit., p.4.

Chapter VI

Education and the Future of Texas

Any look at a region's future warrants close scrutiny of its educational patterns to better determine their eventual role in its development. This is even truer in 1986 than it was in the past, given the rapid shifts in the technological and economic bases of the society. Tennessee Gov. Lamar Alexander expresses it well: "Better Schools is perhaps the major domestic issue today. It's at the center of whether we can become competitive in the world market. That shoots it to the top of the states' list of priorities." (1)

Numerous commissions have studied American education in recent years and have essentially come up with similar conclusions and recommendations. We as a nation must drastically improve the quality of our children's education and we must make that improved product available to all. From both the point of view of societal self-interest and the American belief in equal opportunity for all, it is vital that our elementary and secondary school systems be greatly improved. We need to better prepare the young adults of the early 21st century to face the technological and economic challenges of the coming era. Economic and technological challenges aside, we must improve our educational system for other equally compelling reasons: "equal opportunity for all our children and preservation of an informed population capable of self-government -- a citizenry with a shared sense of democracy and a vision of our potential as a nation." (2)

The Texas Committment to Education: Any state left behind in this move towards educational excellence will be hard pressed to share in the economic benefits of the future. Where does Texas stand on educational committment as compared to its sister states? Gov. Mark White has expressed his views clearly: "The new economy in Texas is an education-driven economy. We're looking for the intellectual fuel to compete in the information age. Originally, cotton farmers and cattle drivers were the source of the state's economic power. Then in 1901 at Spindletop the oil age came into being...But we can't take oil for granted anymore. Teachers and well-trained minds are now being called upon to lead the way. And like the venture capital it takes to build a new enterprise, their intellectual capital is the feed-stock of the new economy." (3)

Texas spends approximately 45 percent of all state revenues on education. While the percentage has climbed only a few points in the last decade, in constant dollars Texas has increased its expenditure for education by almost 24 percent. More than any other

enterprise, education is the business of the state of Texas. (4)

In contrast to other states, Texas ranks 20th in per capita spending on education at approximately $750. By spending 6.8 percent of their personal incomes on education, Texans rank 26th amongst other states' residents. If we combine both state and local spending for education as a percentage of total spending, Texas is second only to Utah while California ranks 43rd and New York, 46th.

Texas accomplishes this while maintaining a respectable teacher-to-student ratio of 17.9 ranking in 28th place. At an average salary of $22,560, Texas pays its teachers 55 percent more than its per capita income. Additionally, Texas spent $3,287 per pupil in 1984-85 ranking 26th amongst states and spending 96 percent of the national average.

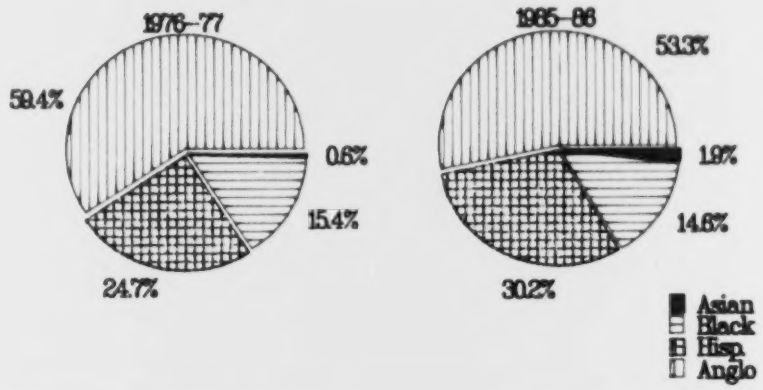
The Texas educational system is at least near the national average in many key statistics and above average in others. Yet there is growing concern over the state's ability to adequately prepare its children for the next century. While much of this anxiety reflects qualitative rather than quantitative dimensions of education, the issue will not disappear soon. As we will see, the challenge of providing quality education that will adequately prepare young Texans for their future adult roles may well be exacerbated by demographic shifts that will affect the size and composition of both the student and the teacher populations of tomorrow.

The Texas Student Population: We estimate that over 3.5 million Texas children between 3 and 19 were enrolled in school in 1985-86. Unfortunately enrollment data are not available for all children, irrespective of the type of schools attended. Thus, we rely on the age-sex specific enrollment rates derived from the 1980 Census for the four ethnic groups. Proportionally, Anglos comprise 56 percent of the total compared to Hispanics (28 percent), Blacks (14 percent) and Asians and Others (2 percent).

Data prepared by the Texas Education Agency (TEA) yield more meaningful findings though these relate solely to public school attendance. (5) Texas public school membership totalled over 3.1 million in the Fall 1985 survey. As Table 6.1 indicates, this reflects a gain of 309,000 (or 10.9 percent) over a ten-year period. Interestingly, the Anglo membership declined over the decade while that of Blacks grew by only 5 percent. On the other hand, Hispanic students numbered 952,000 in 1985 compared to 700,000 ten years earlier - a gain of 36 percent. While not as great numerically, the proportional growth of Asian students was even more remarkable. From only 16,000 in 1976, their numbers reached almost 60,000 in 1985 -- a growth of 275 percent!

Fig. 61

Texas Public School Membership
by Ethnic Group



From 59.4 percent in 1976, the Anglo share of students was reduced to 53.3 in 1985. The Black proportion also fell slightly. The Hispanic share rose from 24.7 to 30.2 percent and that of Asians from 0.5 to 1.9 percent. The proportion Anglo rises in the higher grades. In the early grades, Anglos constitute no more than half the public school population; in the upper secondary grades, their share approaches 60 percent.

Looking just at the most recent five years, from 1980-81 to 1985-86, public school enrollments rose by almost 250,000. About 63 percent of that increase came from Hispanics and only 17 percent from Anglos, 10 percent each from Blacks and Asians and Others.

Remarkable ethnic shifts in the school age population of Texas have transpired over the past ten years. Such patterns will accelerate in the future. The educational challenges posed by ethnic shifts have already led to controversy over bilingual education. Indeed, bilingualism has become one of the most explosive issues in American education. Whatever type of bilingual teaching approach is followed, it is generally agreed that children should be taught to adequately communicate in English. Language will be one of Texas' most vexing issues as the state adjusts to a rapidly changing population. We will return to this issue later, but for now, let us examine the school enrollment projections to see what further ethnic changes can be expected.

Future School Enrollments: We noted in Chapter IV that the proportion of children and young adults (i.e. age 0-24) in Texas will fall in the future. From 41.8 percent in 1985, their share will decline to 37.8 in 2000 and 33.6 in 2035. Furthermore, this shift will affect all four ethnic groups. Hispanics between age 0 and 24, for example, will drop from being 53.0 percent of the Hispanic population in 1985 to 37.3 fifty years later.

The number of people under age 25 will increase however. (Table 6.2) In 1985, there were 6.9 million Texans of that age; by 2000 another million will be added and in 2035 they will total just under 10 million. The shifts in ethnic distribution will be particularly dramatic in this age group. Anglo numbers will begin to fall almost immediately. The 1990 projected total of 3,754,000 matches almost exactly that projected for 2035. Both are below the 1985 estimate of 3,829,000. Blacks too will experience little change in population over the next half century. Hispanic numbers will rise from 1.9 to almost 4.5 million while those for Asians and Others will grow from 135 to 759 thousand.

The number of persons under age 25 does not necessarily reflect the number of school attendees. Not all people in that age category attend school and enrollments rates differ by age and ethnicity. Our projections of school membership are based on enrollment rates derived from the 1980 Census. They rely solely on age and do not refer specifically to level or type of school attended. We limit the analysis to children between the ages of 3 and 19. The age-specific enrollment rates are listed in Table 6.3. Ethnic differences are noted in the kindergarten age (3-4) and in the senior high school age (15-19). Hispanics are less likely to attend in both these age groups than other ethnic groups. Asians and Blacks are more likely to attend kindergarten than either Anglos or Hispanics perhaps because of a larger proportion of working mothers.

In 1985, we estimate that 3.5 million Texans between the ages of 3 and 19 were enrolled in some type of school. (See Table 6.4) That number will increase to 4.4 million in 2000 and 5.4 million in 2035. Thus the next half century will witness a growth in the number of students between 3 and 19 of almost 2 million if current enrollment rates are held constant.

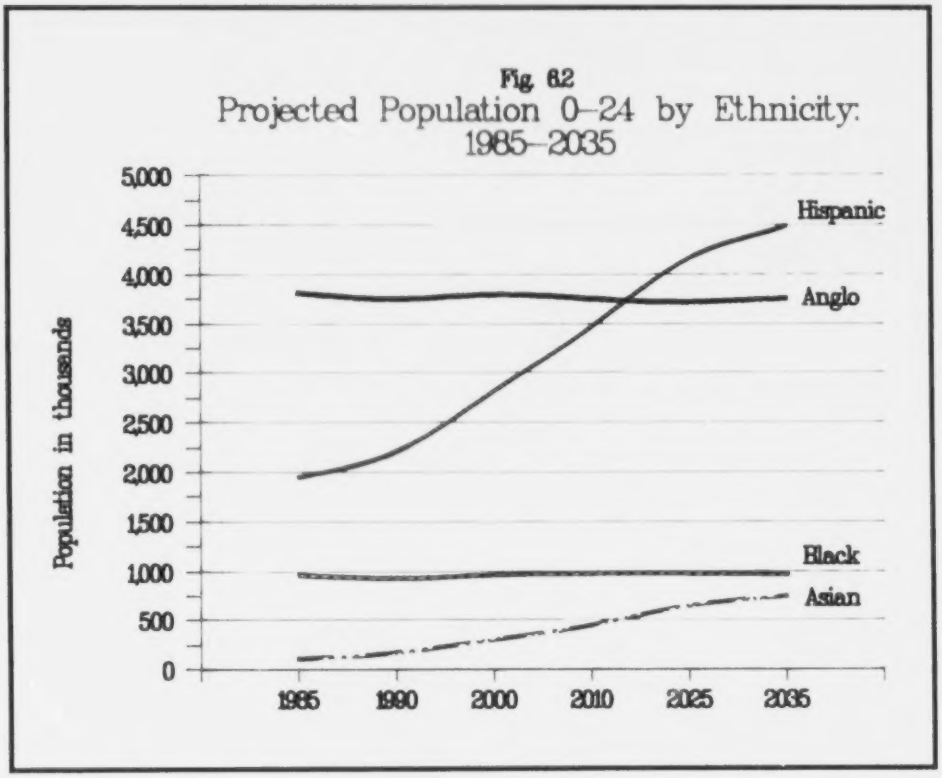
The ethnic picture is similar to that noted for the total population under age 25. However, Anglo enrollments will not fall but will remain fairly constant over the next 50 years as will those for Blacks. Hispanic and Asian enrollments will soar. The latter will increase from 68,000 to 429,000. Hispanic school membership will rise from less than one million to almost 2.4 million.

By the turn of the century, Anglos will no longer constitute a majority of the school children of Texas. About 20 years later, Hispanics will surpass Anglos and become the most

numerous group in school. Two other factors suggest that this shift might be even more radical. Hispanic enrollment rates tend to be somewhat lower than those for Anglos reflecting higher drop-out rates among adolescents. This could change and result in enrollment increases in future years. Secondly, these projections are for all school children and not solely for those attending public schools. As the 1985 Anglo proportion of students is about three percentage points lower for public schools than that estimated for all schools (53.3 vs. 56.4), such a differential may well continue to exist. It is quite possible that by 1990 Anglos will no longer comprise the majority of children enrolled in the public schools of the state. This is already the case in the lower grades.

Implications of Enrollment Shifts: The sheer growth of almost 2 million students over the next 50 years will necessitate another 100,000 teachers if current teacher-student ratios are to be maintained. Most of these will be hired by the state system where almost 90 percent of all students are enrolled. Bilingual instructors will be particularly in demand. Currently, three-quarters of all public school teachers are Anglo and only about 13 percent are Hispanic.

Fig. 62



Even if bilingual training were not an issue, an overall teacher shortage will be facing both the nation and the state for the foreseeable future. "Simply because of impending retirements, many school districts face a situation in which half of their teachers may have to be replaced in the next three or four years." According to the Carnegie Forum on Education and the Economy, the nation "can anticipate a steep increase in the annual rate new teachers must be hired: from 115,000 new teachers in 1981 to 215,000 in 1992, by conservative estimates. Between 1986 and 1992, 1.3 million new teachers will be hired." (6) Texas faces particularly critical choices with respect to teachers during the next decade, when perhaps half of its present elementary and secondary teachers will retire. A number of developments make the retirement of such a large proportion of the state's teachers both a problem and an opportunity. The pending shortages result from demographic shifts--the retiring teachers were the teachers of the large post-war baby boom, but shortages are caused by increasing enrollments of the children of the baby boomers and the fact that few teachers were hired during the "baby bust" period of the 1960s and 1970s. The shortages are aggravated by the fact that increased economic opportunities for women and minorities have caused many to leave teaching because of low pay and poor working conditions relative to the opportunities outside teaching. As measured by SAT scores, moreover, the quality of students going into education is declining.

Since teachers occupy a pivotal role in the educational system, the quality of the teachers who are attracted to Texas schools will determine the quality of the state's school system. In order to attract better teachers, major improvements will be needed in teachers' salaries, their status within the educational system, teacher standards, and teacher education. It will be particularly important to attract and retain high quality minority teachers, not only because of their ability to understand and teach minority students, but also to serve as positive role models for those students.

If Texas is to have a well trained labor force in future years then adequate training of minorities will be particularly important. How can the educational achievements of minorities be brought up to those of the majority? For a number of years the Texas Assessment of Basic Skills program (TABS) has measured the level of mathematical and reading skill attained by students in grades 3, 5, and 9. In all three, Blacks and Hispanics scored below Anglos. (Asians are not included because of their small numbers.) However, there is evidence of some "catching up." The report for 1985 concludes that for grade 9, "For mathematics, students in all three ethnic groups have shown improvement each year since 1980. The performance of Black and Hispanic students has improved at a higher rate than that of White students and differences in performance levels have narrowed. For example, the percentage of White students mastering the total mathematics test in 1980 was 40 percentage points above that of Black students, while in 1985, the difference was 23

points. For the five testing cycles from 1980 through 1984, students in all three ethnic groups had shown a strong improvement trend in reading similar to that for mathematics. However, in 1985 reading performance for all three groups declined." (7) Clearly much more needs to be done if parity among ethnic groups is to be attained.

The cultural implications have been alluded to earlier. How will the state's educational system adapt to massive shifts in enrollment? Will Hispanic and Asian children be immersed into English language training as was the case with the immigrants of the late 19th century? Will the languages of the motherland be maintained and encouraged? To a great extent, the Texas of the 21st century will be determined by the language training emphasized in the schools and the labor force of the future will necessarily rely on an educated and well trained citizenry.

Education and the Quality of the Labor Force: Two important realities for the future of Texas and the nation were the twin realizations during the 1980s that the American and Texas economies were in trouble and that economic progress, or even maintaining present living standards, depended heavily on the quality of the work force. In a global, knowledge-based world, competitiveness is determined mainly by productivity, flexibility, and quality outputs. In a high wage country like the United States, competitiveness also depends on management systems and technological innovation. In 1984 no country had average wages over 75 percent of those in the United States and in a number of countries wages were less than 10 percent of those here. If we lose our technological and productivity edge, we will compete according to wages, which implies a continuation of the real wage decline that started in the 1960s.

Some insight into the nature of our competitveness problem is afforded by this report: "At a modern factory outside Seoul, Korean workers produce home video recorders...They work seven days a week (with two days off a year), 12 hours a day. They earn $3,000 a year. Though the American market for home video recorders is big, profitable and growing, none of the machines sold here is produced in the United States. We cannot, nor wish to, compete with these Korean workers on their own terms." (8)

There can be little doubt that the maintenance of a high wage, competitive economy requires highly skilled, educated workers and these skills must be broadly distributed throughout the work force. If we attempt to compete on the basis of semiskilled and unskilled labor, we must be prepared to accept world wage levels for that kind of labor, which implies not only declining real wages, but probably a polarization of income between those who are highly educated and those who are not. Such an outcome would have serious negative consequences for a democratic society.

A more competitive economic environment puts a heavy premium on productivity, and economists have demonstrated that almost all improvements in productivity since 1939 have come from advancements in technology and the quality of human resources. Less than 20 percent of productivity improvements have been associated with increases in physical capital. (9) What has been true in the past will be even more the case in a global, knowledge-based economy.

We have always known that our people are our most important asset, even if we have not always acted as if we understood this reality. Educated, trained, motivated people are an almost unlimited resource. They will develop the institutions, policies, and organizations required to make the best use of other resources. This is one reason countries like West Germany, Japan, and Korea, with very limited physical resources, have developed very competitive economies to improve their real wages and national power. In a world where capital and technology are very mobile, the quality of human resources becomes the critical factor of production.

How are we as a nation doing insofar as improving the quality of our human resources? The evidence suggests that the United States has relatively high average levels of schooling (See Table 6.5) but that we do not do very well in comparison with other countries in standardized tests in areas like mathematics, where test scores in 1981-82 placed the United States 13th among 15 countries. (10) Studies show United States high school graduates to have very low literacy skills. In 1984, only 39 percent of all high school graduates were adept at reading.(11) A 1985 study of 1981-82 comparisons of eighth grade students in the United States and Japan found U.S. standards to be inferior to their Japanese counterparts in every mathematics category, sometimes by substantial margins.(12) A 1986 study of 21-25 year old Americans found that, while about 95 percent could perform at lower levels (about fourth grade) of minimal literacy, few could read at levels required to perform even moderately complex quantitative, reasoning, and reading tests. Ninety-six percent of Anglos, 82.2 percent of Blacks, and 92.4 percent of Hispanics read at a fourth grade level; and at the 11th grade level the proportions were Anglos 67.6; Blacks 31.0; Hispanics 52.3.(13)

The results for Texas are no better and performance on many standards are below average for the nation. In 1984, Texas high school graduates ranked 46th in the nation on SAT scores. And in 1980 Texas adults over 25 ranked 36th in the nation in median years of schooling, and (in 1981) 38th in the important area of preprimary enrollment as a percentage of first grade enrollment.

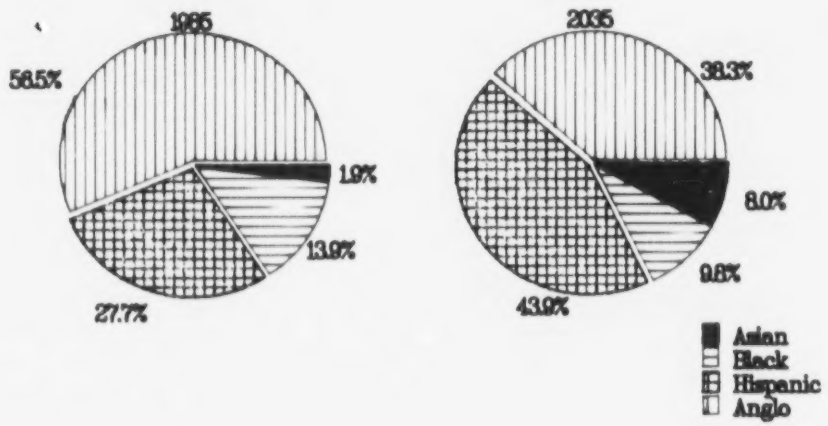
Information technology must have people with math and science skills. Unfortunately,

"in Texas last year [1981] only about 7 percent of all high school graduates had any math beyond the required first year of algebra. Texas Instruments must hire the majority of its engineers and technicians from out of the state. And we conduct clases in our plants to teach fourth and fifth grade math to workers unable to perform their job. They are all high school graduates. This has to change if students are going to find jobs and industry is going to fill its needs." (14)

Because minorities are such a larger and growing proportion of both the Texas workforce and school population, the educational experiences of minorities are particularly important. In 1980 70 percent of Anglos but only 40 percent of Hispanics and 60 percent of Blacks over 25 had graduated from high school. With respect to school completion and persistence, Texas students have problems, but the rates for Hispanics are particularly low. For example, only 66.4 percent of Hispanics who were ninth graders in 1979 became seniors in 1982 and only 59.7 percent graduated from high school; the rates for Anglos were 86 and 74.5 percent and for Blacks 81 and 63.2 percent. (15)

Fig. 6.3

Projected Enrollments by Ethnicity: Texas, 1985 and 2035



Conclusion: Texans have been well aware of the state's education problems and have for some years attempted to catch up. There have been particularly important efforts to

establish a world class higher education system. And while the state has some way to go to catch leading states like California and Massachusetts, progress has been made and Texas' higher education institutions compare favorably with those in the South and Midwest. The state also has made significant efforts to improve elementary and secondary education. Between 1970 and 1984 Texas moved from 34th place to 16th in terms of state and local spending for education, and between 1973 and 1983 Texas increased spending for pre-college education almost twice as fast as the rest of the country. Texas nevertheless still lags behind the leading states on many education indicators as was noted earlier in this chapter.

Texas also has sought to reform the education system as well as to increase expenditures for schools. Particularly important reforms were enacted in 1983-84, which increased state aid to school districts by 26 percent for the 1984-85 school year. In addition, these reforms attempted to strengthen student and teacher performance, create career ladders, and provide additional resources for prekindergarten and other special education categories, as well as teacher salary increases. An evaluation of these efforts concluded that these changes had "in many ways" been successful "even in the first year." Teachers' salaries were increased substantially and the funding of education was shifted more to state revenues and away from property taxes. These reforms likewise "reduced somewhat the disparities in expenditures and teacher salaries between wealthy and poor districts." (16)

In the final analysis, whether or not Texas is able to use education to build a world class economy depends heavily on whether the state's leaders are satisfied to be about average for the United States (which has important deficiencies relative to other countries) or whether they strive to become world class. To remain competitive even within the nation will require much more attention to additional reforms in the state's education system. Educational equity, especially heavy attention to the education requirements of minorities and low income Anglos, is particularly important. To really become world class will, in addition, require further improvements in higher education, especially in cutting edge research and development; strong attention to reforms in the elementary and secondary school to focus more on the outcomes required for a knowledge-based economy; and much greater attention to efficiency in the use of education resources. These reforms will not be cheap, but it will probably be more expensive in the long run not to make them.

TABLE 6.1

TEXAS PUBLIC SCHOOL MEMBERSHIP BY ETHNIC GROUP: 1976-1985
(in thousands)

Year	Total	Anglo	Hisp.	Black	Asian
1976-77	2840	1686 (59.4)	701 (24.7)	437 (15.4)	16 (0.5)
1977-78	2857	1680 (58.8)	722 (25.3)	438 (15.3)	18 (0.6)
1978-79	2867	1668 (58.2)	742 (25.9)	435 (15.2)	22 (0.7)
1979-80	2873	1650 (57.4)	764 (26.6)	432 (15.0)	27 (0.9)
1980-81	2900	1634 (56.4)	797 (27.5)	435 (15.0)	35 (1.1)
1981-82	2936	1634 (55.7)	826 (28.1)	435 (14.8)	40 (1.3)
1982-83	2986	1645 (55.1)	853 (28.6)	440 (14.7)	47 (1.5)
1983-84	3009	1645 (54.7)	872 (29.0)	442 (14.7)	51 (1.6)
1984-85	3060	1661 (54.3)	898 (29.3)	447 (14.6)	54 (1.7)
1985-86	3149	1678 (53.3)	952 (30.2)	460 (14.6)	59 (1.9)

Source: Texas Education Agency

TABLE 6.2

PROJECTED POPULATION 0-24 BY ETHNICITY: 1985-2035
(in thousands)

Year	Total	Anglo	Hisp.	Black	Asian
1985	6887	3829	1965	958	135
1990	7094	3754	2206	941	193
2000	7902	3797	2817	967	321
2010	8660	3757	3458	985	460
2025	9528	3735	4160	979	654
2035	9963	3755	4480	969	759

TABLE 6.3

ENROLLMENT RATES BY AGE AND ETHNICITY: 1980
(percent)

Age	Anglo	Hisp.	Black	Asian
3-4	32	21	37	39
5-9	92	90	92	91
10-14	99	98	98	97
15-19	74	68	73	79

Source: U.S. Bureau of the Census, Texas 1980, Volume D.

TABLE 6.4

PROJECTED ENROLLMENTS BY ETHNICITY: 1985-2035
(in thousands)

Year	Total	Anglo	Hisp.	Black	Asian
1985	3527	1991	978	490	68
	(100)	(56)	(28)	(14)	(2)
1990	3753	2054	1096	503	100
	(100)	(55)	(29)	(13)	(3)
2000	4412	2157	1520	551	184
	(100)	(49)	(34)	(12)	(4)
2010	4642	2032	1818	533	258
	(100)	(44)	(39)	(11)	(6)
2025	5194	2080	2203	541	370
	(100)	(40)	(42)	(10)	(7)
2035	5390	2064	2367	530	429
	(100)	(38)	(44)	(10)	(8)

TABLE 6.5

EDUCATIONAL ATTAINMENT OF THE WORK FORCE IN OECD COUNTRIES

Country	Avg. Number Yrs. Formal Education Pop. 25-64	Changes in Avg. Per Cap. Education of Pop. 25-64		
	1976	1950-60	1960-70	1970-80
Belgium	10.30	0.6	0.8	0.9
Canada	10.54	0.6	0.8	1.0
Denmark	9.70	0.3	0.5	0.6
Finland	8.98	n/a	n/a	n/a
France	9.87	0.5	0.6	1.0
Germany	9.36	n/a	0.5	0.2
Italy	6.91	1.1	1.4	1.6
Japan	10.42	1.1	1.1	0.8
Netherlands	9.14	0.4	0.7	1.0
Norway	9.28	0.3	0.6	1.2
Sweden	9.33	n/a	0.8	1.2
United Kingdom	10.41	0.3	0.4	0.6
United States	11.60	0.8	0.9	0.9

Source: Educational Statistics Yearbook, vol. 1, OECD, Paris, 1974, and Education, Inequality and Life Chances, OECD, Paris, 1975.

Notes - Chapter VI

1. Carnegie Forum on Education and the Economy, Task Force on Teaching as a Profession. A Nation Prepared: Teachers for the 21st Century. Carnegie Forum on Education and the Economy, May 1986, p. 10.

2. ibid., p. 14.

3. ibid., p. 25.

4. State Job Training Coordinating Council, Policy Development Committee. Demographic, Economic and Educational Trends in Texas. July, 1986, pp. E-3 - E-31.

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8. Carnegie Forum on Education and the Economy, Task Force on Teaching as a Profession: A Nation Prepared, Washington, D.C., CFEE, 1986, p. 12.

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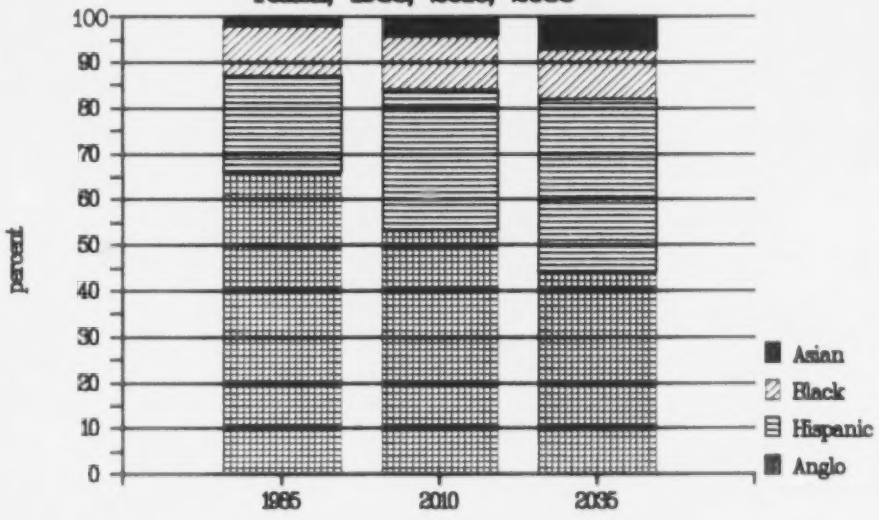
Fig. 71

Projected Ethnic Distribution of the Labor Force: Texas, 1985, 2010, 2035



Chapter VII

Labor Force and the Economy

Together the size and the quality of the labor force will help determine the economic future of Texas. As noted in the preceding chapter, improving the educational standards for all young Texans will help shape a work force suited to meet the demands of the hi-tech era of the 21st century. However, the size of that work force is almost predetermined, given that even those entering that stage of life in 2005 are already born. Only dramatic shifts in levels of immigration could affect the number of people of employment age in the near future.

In Chapter IV we noted that significant changes will occur in the state's adult age distribution in future years. The proportion 15-44 will fall gradually, while that 45 and over will increase. Anglos will form an ever smaller share of the adult population while that of minorities, especially Hispanic, will grow.

Proportions must be translated into numbers to be meaningful for policymaking. A falling proportion does not necessarily mean declining numbers. For example, in 1985, Texans aged 25-44 represented 32.6 percent of a population of almost 16.5 million, or 5.4 million. In 2035, this same age group will be but 25.3 percent of the population but will number over 7.6 million. In this chapter we will look at the labor force of the future, project its size and composition and speculate as to what all this will mean for Texas' economy.

Labor Force Participation Rates: To determine the number of persons in the labor force we must rely on two sets of data: age-sex specific population projections and age-sex specific labor force participation rates which are then applied to the projections. The rates we have selected are based on a careful examination of various sources of information, including the U.S. Bureau of Labor Statistics (BLS) national projections as well as numerous regional and state projections.(1) In addition, we have analyzed current and probable future workforce trends in the state and these too have been taken into consideration in developing age-sex-ethnic specific labor force participation rates for Texas.

Our preliminary future rates were then compared to those for the nation from BLS and certain adjustments were made. Some changes are forecast for the next 15 years, especially for women who will continue to increase their participation in the labor force. However after 2000 we do not alter the age-sex specific rates for any ethnic group. In general our assumptions are quite conservative and do not vary significantly from those by BLS for the nation.

The Size of the Labor Force: We estimate the labor force in 1985 to consist of just over eight million people (Table 7.1). That number should jump to 11.5 million by the turn of the century and surpass 15.7 million in 2035. The fifty-year growth of 95 percent will exceed that for the total population (80%). This reflects both the increased workforce participation by women and the continued immigration of young adults. The number in the labor force would be even larger if we relied on our High Immigration scenario.

Age and Sex Composition: In future years, the labor force of Texas will become increasingly feminized and, perhaps more important, considerably older. In 1985, women comprised 41.8 percemt of the labor force; that proportion will rise to 46.6 percent in 2000 before falling off somewhat in the 21st century. Recall that no further changes in participation rates by age and sex were made beyond 2000. Nevertheless, the female proportion in the labor force in 2035 (43.8) will be higher than that noted today.

As with the overall population, so too will the labor force age in future years. In 1985 only 26 percent of the labor force consisted of persons 45 and over compared to 74 percent under 45.(Table 7.1) By the turn of the century, 32 percent will be 45 or over and by 2035, that proportion will reach 36 percent.

The impact of the decline in the number of births which began in 1965 and only increased again in the 1980s is noted in the size of the young labor force. The number of adults, 20-34, who will be working or looking for work will actually be smaller in 2000 than today. Thus young workers' share of the total labor force will shrink considerably. These shifts in the age composition of the labor force of the future will have serious consequences for the state's economy.

Ethnic Composition of the Labor Force: Not only will the state's labor force age, it will also be more ethnically diverse. Table 7.2 illustrates this shift. In 1985, two-thirds of the labor force was Anglo, another 21 percent was Hispanic, 11 percent Black, 2 percent Asian. Ethnic diversity was slightly less prevalent in the labor force than in the overall population in that the proportion of Anglos was higher there than in the total population (63 percent).

Proportions will shift quickly. By 2000 Anglos will comprise 58 percent of those in the workforce while Hispanics will represent 27 percent. Black and Asian shares will not change much. By about 2015, Anglos will no longer be the majority of the Texas labor force and in 2035, they will be 44 percent of the total compared to 38 percent for Hispanics, 11 percent for Blacks and 7 percent for Asians. These proportions almost exactly match the contributions of each ethnic group to the total population of the state in that year.

Table 7.3 is particularly illustrative of the changes that can be expected in the Texas labor force. Between 1985 and 2000 a total of 3.4 million people will be added. Of those, 37.9 percent will be Anglos, 42 percent Hispanic, 13.6 percent Black, 6.5 percent Asian. Less than 20 percent will consist of Anglo males.

Shifts beyond the year 2000 are even more dramatic as the contribution of Anglos to the growing labor force falls to 22 percent in the first decade of the 21st century. From 2010 to 2035 more Anglos will leave the workforce than will enter it. The supply of young Anglo adults will not be sufficient to replace those who drop out either through retirement or death. The shift is particularly dramatic in the period 2010-2025 where almost 81 percent of all the growth in the labor force is accounted for through Hispanic gains while Anglos decline in numbers.

These remarkable changes that will transpire can be summed up in one statistic: Between 2000 and 2035, Anglo females and minorities will comprise 95 percent of the new entrants into the labor force of Texas. Should our high immigration scenario prove to be more accurate their contribution would be even greater. Herein lies the power of shifts in demographic behavior. The fertility of Anglos has been very low for almost two decades; on the other hand, immigration continues at high levels and the fertility of the immigrants is higher than that of the Anglos. In addition, more women are entering the workforce. The result is inevitable. Yet, these are simply demographic numbers. What does all this mean for the economy and the well being of Texas in future years?

The Current Texas Economy: Before the mid-1980s, the Texas economy performed relatively well. Between 1960 and 1980 gross state product, personal income, and non-agricultural employment generally increased at annual rates of well over 4 percent a year. As can be seen from Table 7.4, Texas per capita income increased faster than for the U.S. as a whole and in 1981 and 1982 exceeded the national average for the first time in modern times. Between 1975 and 1985, Texas added almost 2 million jobs. The rate of new job creation remained high between 1980 and 1984, when the state's unemployment grew by 586,000. Job growth kept Texas unemployment below the national average, despite rapid growth in the state's work force.

The structure of the Texas economy also is changing in ways similar to that of other states. Goods producing activities are declining relative to services and Texas is being drawn incrasingly into the international economy. Between 1980 and 1984, employment in the state's service industries increased at about 5 percent a year, while total employment was increasing at an annual rate of less than 2 percent. In terms of output, manufacturing

increased at a faster rate than services and is expected to do so throughout the rest of this century. However, between 1980 and 1985, all of the state's net new jobs were in the services, since goods producing actually declined by 10,000. As can be seen in Table 7.5, analysts associated with the Texas Economic Forum expect services to continue to account for between 74 and 93.4 percent of all new jobs between 1985 and 2000.

The Texas economy is no longer "depression proof" as many Texans assumed it to be during the 1970s and early 1980s. Between 1972 and 1984 the state suffered employment losses in most industries and in all parts of the state. Especially affected were oil, steel, agriculture, and apparel manufacturing. In 1985-86 even the electronics industry experienced employment problems. As noted earlier, the only industries not to lose employment were services, government, trade and finance, insurance, and real estate. (Table 7.6)

In 1986 the Texas economy was hard hit by a serious recession in the oil and gas industry. This, together with the problems with agriculture and basic manufacturing industries, caused unemployment to skyrocket to 10.5 percent in June. For the first time, Texas unemployment rates were above those for the rest of the country. Similarly, per capita income fell below the national average. A major reason for this 1986 slump was the drop in oil prices from $37 a barrel in the early 1980s to $12-13 a barrel in 1986. Each $1 drop in oil prices costs the Texas economy a net loss of $2.3 billion, 13,600 jobs, and a loss of $100 million in state government revenues. High oil prices had helped the Texas economy achieve easy growth during the 1970s and early 1980s at the expense of the rest of the country. In 1986, by contrast, low oil prices hurt Texas and helped the rest of the country. Just as oil had helped propel Texas per capita incomes above the national average, oil and gas taxes made it possible for Texas to expand services without raising taxes. In fact, during the mid-1980s Texas ranked 49th among the states in revenues collected per dollar of personal incomes, 46th in all taxes collected, 43rd in user charges, and 47th in government expenditures. Inflation-adjusted taxes actually declined in Texas between the mid-1970s and mid-1980s. The decline in oil prices therefore created fiscal problems for Texas because the state's revenues were about $3 billion below where they would have been if oil prices had remained at the 1982-83 levels.

Outlook for the Texas Economy: The outlook for the Texas economy depends heavily on one's assumptions about developments within the state as well as in the national economy. Few, if any, observers expect the Texas economy to return to its pre-1985 position of more rapid economic growth than the rest of the country. Most analysts pay close attention to what happens to oil prices, because at least 20-25 percent of the Texas economy depends on this industry.

There are divergent views as to the future economic prospects for the state. These range from the pessimistic forecasts of the Comptroller to the more optimistic views of the acting director of the University of Texas Bureau of Business Research and those of the Texas Economic Forum (2)

Our own view about the immediate economic growth for Texas tilts toward the Comptroller's pessimistic forecast. We do not believe national economic growth is likely to be more robust until the budget deficit is reduced and there is more balanced economic policies, including international cooperation. Moreover, it is unlikely that the national or state economies will get much boost from the 1986 tax reform, which will actually deter business investment in the short run. Similarly, increased spending will probably result in greater imports rather than the kind of domestic investment we could expect from increased consumption in the less internationalized 1960s economy. Despite the fact that the dollar has declined relative to the European currencies, exports have not increased as much as expected because foreign producers have higher productivity growth, lower costs, and substantial profit margins. Many foreign companies are more interested in market share and long-run strategy concerns than the short-run profit maximizing that motivates too many American companies. As a consequence, foreign producers are willing to settle for short-run profits that would drive American companies out of even the American market.

The long-run outlook for the Texas economy can be influenced by Texas public policies. In our view the most critical determinants of the state's future include:

1. The success Texas political leaders have in diversifying the state's revenues. Despite improvements in spending for education, the state still ranks relatively low on many achievemnt indicators. Substantial improvements will require additional efforts. To some extent this will necessitate greater revenues, but it will also require reforms to improve productivity in the use of education resources. Texas ranks about 48th in the nation in expenditures for health and welfare. The challenge for the state will be to increase investments in these important human resource development functions, despite a slow growth economy. This cannot be done in the long run without diversifying revenue sources, including a personal income tax. The main obstacle to a more effective tax system is the belief that an income tax would harm the state's economic growth. Taxes are relatively unimportant in business location decisions and certainly are much less important than markets and the quality of human resources. As noted in Chapter VI, the quality of a state's work force, not the tax system, will determine the quality of its industry.

2. The demographic changes discussed in this report will present major challenges to Texas' leaders. Educational equity is very important because all of the net increase in the

labor force after the first decade of the 21st century probably will come from minorities, especially Hispanics. The state's growing population diversity provides many cultural and economic advantages that could make Texas a national leader in education, health, and many sophisticated manuifacturing activities. But there is also the danger that cultural and ethnic diversity could lead to debilitating conflict. The state's leaders will therefore face the challenge of maximizing the benefits and minimizing the dangers of a multicultural society.

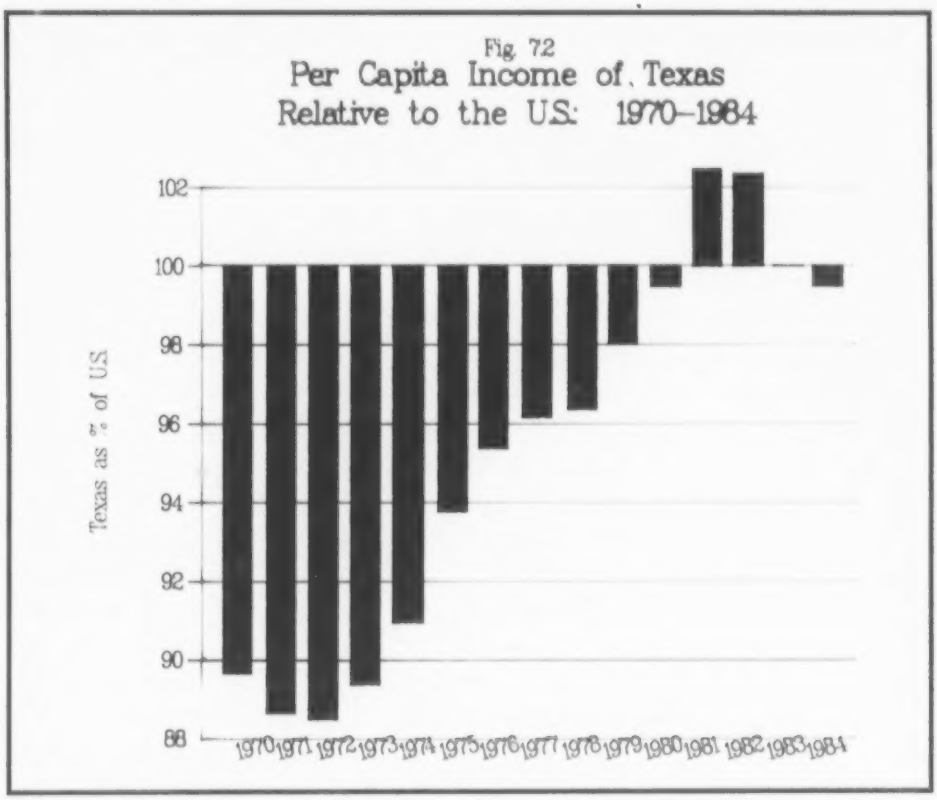
As noted in our population projections, the state's future demographic characteristics depend heavily on immigration. It remains to be seen whether the immigration reforms adopted by the U.S. Congress in 1986 will do much to slow the flow of illegal immigrants into Texas and the U.S. For one thing, the Act permits a multiplicity of identifiers which is an open invitation to fraudulent use of documents. Nevertheless, legalizing the flow of immigrants is a step in the right direction. Despite doubts as to the exact number of illegal immigrants in the U.S. and considerable controversy about their impact on the nation's economy and work force, we are pursuaded that illegals depress wages and increase unemployment especially during periods of slow growth like the country has faced in the 1980s. Moreover, increasing the numbers of relatively uneducated workers tends to perpetuate marginal, low-wage jobs that cannot be competitive in a global knowledge-based world. In addition, relatively uneducated immigrants place added burdens on education systems which already are greatly underfinanced. It is sometimes argued that the illegals only take jobs that legal residents will not accept, but we know of no occupations that are filled exclusively by illegals. We believe, however, that many employers' preferences for people whose options are limited--and therefore who are willing to work hard and scared in marginal jobs--make it difficult to determine whether or not legal residents will take these jobs. If employers cannot pay adequate wages to attract legal residents they should either mechanize or move to other countries where those wages and working conditions are more acceptable.

It is much better for immigrants to enter the U.S. with full legal rights. In the long run this will help Texas improve its human resource development programs. We think legal immigration will always be with us and that it has had net positive effects on the U.S. economy, but we can think of no legitimate reason for illegal immigration in a society that believes in the rule of law.

We also believe that a broader view of our own self-interest requires that we work with Mexico and other developing countries, and international organizations to promote the kind of development in those countries that is in their interest and ours and will therefore moderate the pressures for illegal immigration to the United States.

3. Economic development will not be automatic. Indeed, all of the evidence suggests that the time of easy growth has passed for both the nation and for Texas. Easy growth for the United States resulted from the country's overwhelming economic strength relative to other countries following World War II. Easy growth for Texas resulted from the state's natural resources, especially land, oil and gas. In an internationalized knowledge-based world, growth will be more difficult. The state's leaders must therefore adopt a coherent development strategy based on a firm human resource development foundation. Special attention must be given to flexibility and efficiency in government. The state should work with the private sector and academic institutions to create an environment conducive to productivity, creativity, and growth. Most jobs will continue to be in relatively small firms, so special attention should be given to entrepreneurship and small business development. There also will be a need to be sure that financial systems are available to facilitate entrepreneurship and innovation.

Fig. 72



Conclusion: The main challenge for the state's leaders will be to balance conflicting interests in such a way as to facilitate growth. Taxes will have to be raised to finance human capital investments required for sound economic growth, but this must be done in a way that will avoid providing disincentives for job-creating businesses. The state must increase its welfare and health investments, but this must be done in such a way as to strengthen work incentives and the efficiency of delivery systems. Finally, the state leaders must remain aware of the shifts in ethnic diversity and the need to assure that all Texans, majority and minority alike, share in the economic advances of the future.

TABLE 7.1

PROJECTED LABOR FORCE BY AGE AND SEX
(in thousands)

	Age	Male	Fem.	Total	Percent
1985					
	16-19	248	253	501	6
	20-24	684	533	1217	15
	25-34	1498	1029	2526	31
	35-44	1038	732	1770	22
	45-54	641	450	1091	14
	55-64	450	296	746	9
	65 +	129	76	205	3
	Total	4688	3368	8056	100
2000					
	16-19	358	350	708	6
	20-24	614	598	1212	11
	25-34	1478	1276	2754	24
	35-44	1756	1407	3164	28
	45-54	1302	1013	2314	20
	55-64	568	453	1022	9
	65 +	168	144	311	3
	Total	6244	5241	11485	100
2010					
	16-19	391	383	774	6
	20-24	756	740	1496	11
	25-34	1600	1383	2983	23
	35-44	1613	1308	2922	22
	45-54	1683	1261	2944	22
	55-64	954	730	1684	13
	65 +	208	169	377	3
	Total	7207	5974	13180	100
2025					
	16-19	427	415	843	6
	20-24	803	778	1581	11
	25-34	1855	1594	3449	23
	35-44	1904	1555	3459	23
	45-54	1572	1186	2758	19
	55-64	1206	907	2113	14
	65 +	403	296	699	5
	Total	8170	6732	14902	100
2035					
	16-19	457	443	900	6
	20-24	878	847	1726	11
	25-34	1960	1676	3636	23
	35-44	2009	1636	3645	23
	45-54	1847	1179	3026	19
	55-64	1173	763	1942	12
	65 +	493	357	850	5
	Total	8825	6900	15725	100

TABLE 7.2

PROJECTED LABOR FORCE BY ETHNICITY
(in thousands)

Year	Anglo	Hisp.	Black	Asian	Total
1985	5325	1657	926	148	8056
	(66)	(21)	(11)	(2)	(100)
1990	5936	2097	1113	207	9353
	(63)	(22)	(12)	(2)	(100)
2000	6626	3095	1391	372	11485
	(58)	(27)	(12)	(3)	(100)
2010	6999	4071	1572	539	13180
	(53)	(31)	(12)	(4)	(100)
2025	6948	5460	1678	815	14902
	(47)	(37)	(11)	(5)	(100)
2035	6977	6010	1715	1023	15725
	(44)	(38)	(11)	(7)	(100)

TABLE 7.3

SIZE OF LABOR FORCE CHANGES BY ETHNICITY
(in thousands)

Period	Increase in L.F.	Ethnic Contribution			
		Anglo	Hisp.	Black	Asian
1985-2000	3429	1301	1439	465	225
		(37.9)	(42.0)	(13.6)	(6.5)
2000-2010	1695	373	975	181	166
		(22.0)	(57.5)	(10.7)	(9.8)
2010-2025	1721	-51	1389	106	277
		(-3.0)	(80.7)	(6.2)	(16.1)
2025-2035	824	29	550	37	208
		(3.5)	(66.7)	(4.5)	(25.3)

TABLE 7.4

PER CAPITA PERSONAL INCOME FOR TEXAS AND THE UNITED STATES, 1970-1984 (in thousands)

Year	Texas	United States	Texas as a Percent of U.S.
1970	$3536	$3945	89.6
1971	3692	4167	88.6
1972	3991	4515	88.4
1973	4476	5010	89.3
1974	4953	5448	90.9
1975	5473	5842	93.7
1976	6070	6367	95.3
1977	6714	6984	96.1
1978	7486	7772	96.3
1979	8478	8651	98.0
1980	9439	9494	99.4
1981	10807	10544	102.5
1982	11378	11113	102.4
1983	11686	11687	100.0
1984	12636	12707	99.4

TABLE 7.5

CONTRIBUTION TO TEXAS JOB GROWTH
(In thousands)

Years	Goods Producing Industries	Service Industries	Total Gain Over Period
1970-75	162 (19.3)	676 (80.7)	838 (100.0)
1975-80	483 (34.8)	906 (65.2)	1389 (100.0)
1980-85	-10	41	831 (100.0)
1985-2000 (e)	140-840 (6.6 - 26.0)	1970-2390 (93.4 - 74.0)	2110-3230 (100.0)

Source: Historical Data by Texas Economic Forum computed from Texas Employment Commission data; National Planning Association, 1984 Regional Projections, March,1985; the University of Texas at Austin, Bureau of Business Research, Texas Economic Outlook,1985; Data Resources, Inc., Regional Information Testing Service, Fall, 1985; Chase Econometrics, U.S. Regional Forecasts: State Long-Term Tables, Fall, 1985.

TABLE 7.6

CHANGE IN NONAGRICULTURAL EMPLOYMENT BY SECTOR, TEXAS, APRIL 1981 - APRIL 1985

Sector	April 1985	April 1981	Average Annual Percent Change
Mining	268400	275400	-0.6%
Manufacturing	993600	1099400	-2.4
Construction	434600	426300	0.5
Transportation	371000	377800	-0.4
Trade	1620900	1479400	2.4
Fin., Ins., R.E.	424600	344800	5.8
Services	1295800	1074600	5.2
Government	1141800	1009100	3.4
Total Non Agri.	6550700	6086800	1.9

Notes - Chapter VII

1. See, for example, Texas Employment Commission, Texas Planning Information PY 1986, ERA Dept., Austin, TX, 1986.

2. See, for example, Ladendorf, Kirk, "Texas is Healthy, U.T. Economist Says," Austin American Statesman, October 29,1986, p. F-1; University of Texas at Austin, Bureau of Business Research, Texas Economic Outlook, 1985; Chase Econometrics, U.S. Regional Forecasts: State Long-Term Tables, Comptroller of Public Accounts, Fall, 1985.

Chapter VIII

Other Impacts of Demographic Change

The changing nature of education and its relation to a transforming labor force and economy of the future are critical factors that are affected by the shifting age and heterogeneity of the state's people. However, these demographic shifts will affect every segment of society, not just education and the economy. Capital investments, retail sales, resource utilization are examples of segments that will be affected by changing age and ethnic composition. In this Chapter we examine how demographic shifts will impinge on two important institutions: government, and health and retirement.

Government: Texas is considered to be one of the more politically conservative states. Long dominated by the Democratic party, the last few decades have seen the growth and increasing success at the polls of the Republican party. Yet, with rare exceptions, both major parties have espoused relatively conservative positions on most issues. Furthermore, on the whole, power has remained in the hands of the Anglo majority.

With the growth of the Hispanic and Black population, power has occasionally been more broadly apportioned. In recent years, Blacks and Hispanics have been elected to the U.S. House of Representatives and Texas has a few mayors of Hispanic ancestry. However, Blacks and Hispanics have been elected from districts where they were in the majority. Both major parties court the votes of Hispanics and Blacks and increasingly their voices are heard in the halls of government. The question remains: what about the future, given the demographic shifts that will occur?

As we have seen, the proportion of Hispanics in the Texas population will grow rapidly in future years; that will not be so for Blacks who will simply maintain their current proportional share. However, proportions must be translated into numbers who need to be translated into registered voters who, in turn, must actually vote, if a subgroup of any population is to wield political clout.

Hispanics in the United States are not as likely to vote as are other ethnic groups. In its survey of the 1984 election, the Census Bureau estimated that in the West South Central division (Texas, Oklahoma, Louisiana, Arkansas), only 33 percent of Hispanics aged 18 and over cast ballots. This compares to 62 percent among Anglos and 56 percent for Blacks. (Asians are too few to determine their voting participation.)(1)

If we apply these age-specific rates to Texas, in a hypothetical 1985 election only 765,000 Hispanics out of 2.3 million adults would have voted. In sharp contrast, over 4.8 million Anglos would have voted out of 7.8 million adults. Among Blacks, the numbers would be 783,000 out of 1.4 million. Interestingly, though the Black adult population is considerably smaller than the Hispanic, Black voters would actually outnumber their Hispanic counterparts. (See Table 8.1)

Future voting rates for Hispanics and Blacks will increase somewhat due to variations in their age composition. With no rate changes within age categories, overall Hispanic participation will rise to 36 percent in 2000 and 37 percent in 2035. Similarly, Black participation will rise to 59 and 61 percent while that for Anglos will go from 62 to 64 percent. These improvements will have no bearing on the ethnic voting proportions.

As Table 8.2 shows, in 2000 Anglos will comprise 60 percent of the combined Anglo-Hispanic-Black adult population. They will comprise 70 percent of the voters. Hispanics, though 27 percent of the population, will only be 17 percent of the voters. The share of Black voters will be exactly the same as their share of the adult population -- 13 percent.

By 2035, if current age-specific voting rates persist, about 58 percent of the voters will be Anglos, but Anglos will be only 48 percent of the adult population. Hispanics will represent 40 percent of the people 18 and over but only 28 percent of the voters. Again Blacks will be voting in roughly the same proportion as their share of the population.

Over the next 50 years the Anglo share of voters will be diluted but not to the extent expected given the shifts in overall population. This, of course, will not necessarily be true in specific regions of the state. Furthermore, ethnic voting rates could increase particularly among Hispanics. Finally, any immigration above that projected under Scenario B would drastically change these voting behavior projections.

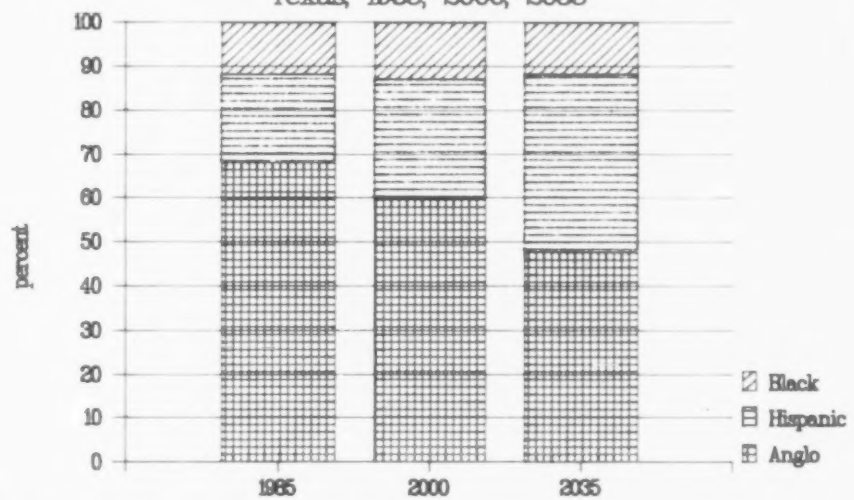
In sum, the potential future power of any Hispanic voting bloc will be sharply curtailed if voter participation does not increase. Unless Hispanic registrations rise and the proportion voting increases accordingly, power at the state level will undoubtedly remain within the Anglo community.

However, the sheer numerical growth of Hispanic voters cannot be ignored. Even if current low rates of voting are maintained, the numbers voting will swell from 765,000 to 1.4 million at the turn of the century and 3.2 million 35 years later. Power may remain in the hands of the Anglo commmunity, but the Hispanic, as well as Black influence will be felt and taken into account.

Health and Retirement: Aging and increasing heterogeneity both affect health and retirement policies. The elderly are much more likely to require medical assistance than are the young. Medical costs and health personnel requirements soar as the number of senior citizens mounts. The relation between growing ethnic diversity and health is less pervasive. Yet, Hispanics, Blacks and Asians all exhibit infant mortality rates higher than those for Anglos. Health conditions in some sections of the state, particularly South Texas, are far from acceptable by general U.S. standards. As the proportion of Hispanics grows, some of these health issues will undoubtedly be exacerabated. If poverty remains rampant among minority groups, most certainly health conditions will worsen and expenditures will rise substantially.

Fig. 61

Projected Ethnic Distribution of the Voting Age Population: Texas, 1985, 2000, 2035



According to the most recent data available from federal statistical sources, Texas ranks 28th among the states in infant mortality, 32nd in the number of physicians per 100,000 persons, and 33rd in the number of hospital beds per 100,000. (2) Thus Texas is not among the higher rated states in the Union on any health indicators, and an increasing proportion of minorities could result in even lower ratings in future years.

Between 1985 and 2035, the Texas population 65 and over will more than triple, from 1.5 to over 5 million. Such a dramatic rise should prompt serious planning for future needs, such as retirement homes and health facilities. Much of this growth will take place after 2010 and will be attributable to the baby boom becoming the senior boom. (Table 8.3)

In contrast to those under 45, the Anglo elderly population will not decline in future years. From 1.1 million in 1985, it will increase to 1.5 million in 2010 and 2.8 million in 2035. Future levels of fertility will have no effect on the size of this group since the retired people, even in 2035, are already born. Black elderly persons will increase four-fold over the 50 year period, from 149,000 to 644,000, again strongly affected by the baby boom of the 1950s and early 1960s.

Growth will be far more substantial for elderly Hispanics and Asians, both because of the aging baby boom generation and particularly because of the continued immigration into Texas of young adults -- the elderly of the 21st century. Hispanics aged 65 and older will increase nine-fold over the 50 year period. Whereas they numbered but 162,000 in 1985, they will surpass 1.4 million in 2035. Asians will grow even more rapidly, from 13,000 to 215,000.

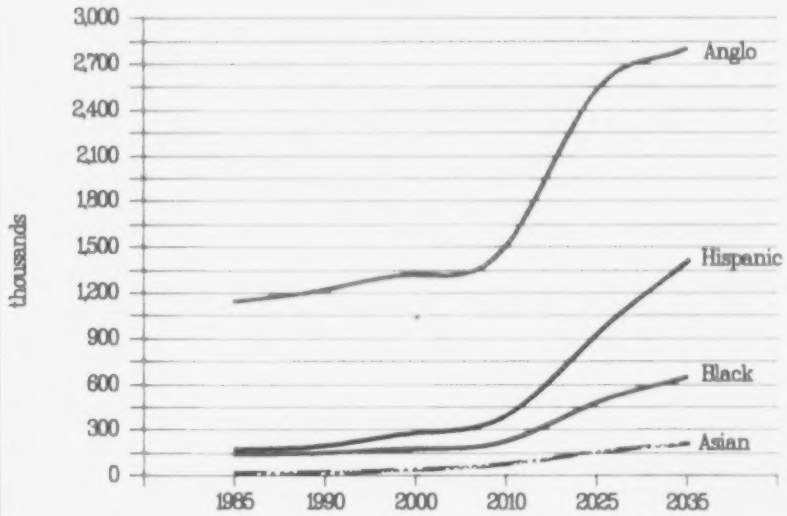
As we have noted, the sheer growth of the elderly population will pose serious challenges for the state and these will be aggravated by the changing ethnic composition of this age group. While Anglos will remain in the majority, the proportion of Hispanics and Asians will grow considerably. Will these people require services different from those provided for Anglos and Blacks? Will language barriers and the resulting poor communications become a problem in providing health care for these elderly? Will cultural differences in how families care for the elderly become an issue?

Earlier we asked whether a primarily Anglo adult population will want to provide the financial resources needed to educate a predominantly minority school-age group. By 2020 and thereafter, the other side of the coin will come up. At that time a work force consisting of many minorities but no majority will be asked to provide the financial resources to care for a still predominantly Anglo elderly population. Will these young and middle aged adults consent to expanding state expenditures for the care of this elderly group? These and many

other questions will be facing the state as it enters the 21st century and begins to make plans for the provision of services to its growing retired population.

Fig. 8.2

Projected Elderly Population by Ethnic Group: Texas, 1985–2035



Conclusion: From this discussion and that in previous chapters, it is abundantly clear that any shifts in demographic behavior affect every segment of society. The age and ethnic composition of the state of Texas is particularly affected by behavioral variations among the different ethnic groups that comprise its population and thus demographic shifts have a far-ranging impact on the state's social, economic and cultural milieu.

How will Texas culture be affected by these dramatic changes that will emerge from the demographic behavior of millions of people in and out of the state? The continuing stream

of immigrants from south of the border together with the newest immigrants from southeast Asia deliver much to the state, culturally, artistically and otherwise. Can these new ingredients be melded into the state's present culture without destroying it or radically altering it? Or should Texas plan for a new, diverse, multi-ethnic culture which would reflect its many groups and the fact that, soon after the turn of the century, none will be in the majority? In sum, will some accommodation to assimilation prevail or will some new type of cultural pluralism emerge?

Traditionally, assimilation into American society has been viewed as the accepted mode of adaptation on the part of immigrants, at least by the old residents. The so-called "melting pot" concept sees each of the new groups contributing to the "stew", adding certain ingredients to it without changing its overall structure. More recently, another culinary expression, "salad bowl", has gained some credence implying that the melting process does not always work adequately.

Cultural pluralism, on the other hand, sees each ethnic group maintaining its identity through language and culture, while still interacting with others in the larger societal setting. "Ethnic resilience" is a more recent term developed by sociologist Alejandro Portes who points out that certain new immigrant groups remain together culturally and economically in part because they have been shut out of the mainstream by the resident group. (3)

The mode of adaptation to be followed in future years remains an important unanswered question. A report by University of Texas at Austin sociologist/demographer Dudley L. Poston and his associates suggests that Mexican immigrants do not suceed economically as rapidly as other immigrant groups. "We are inclined to suggest that first generation Mexican immigrants, perhaps because they hail from a country with a dissimilar social and economic structure, are less successful than other immigrant groups in transfering their skills in the United States." They continue: "The fact that nonimmigrant Mexicans [i.e third generation or longer in the United States] have lesser odds than nonimmigrant whites of being in high income and occupational statuses can be interpreted as an indicator of their still incomplete structural assimilation...In addition, to a greater extent than other immigrant groups, Mexican Americans are affected by continued large-scale immigration from Mexico, which undoubtedly affects the rate of both cultural and structural assimilation, even among second and nonimmigrant groups." Nevertheless, they conclude: "The odds for success of second generation Mexican immigrants and nonimmigrants are so much greater than those of first generation Mexican immigrants that they may be taken as a rough index of their relative success in adapting to the broader economic and social structure of American society." (4)

It is of paramount importance to distinguish between long-time residents of the state (Chicanos) and recent immigrants from Mexico. Anglos must overcome the tendency to lump them altogether. As Rodolfo de la Garza, the director of the Center for Mexican American Studies at the University of Texas, recently stated: "To avoid the negative consequences of immigration reform and protect their civil rights, Chicanos must find ways to limit Mexican immigration...." He then continues: "[Mexican American] attitudes are best understood within the context of that population's historical effort to establish itself as a legitimate and permanent part of American society. Anglo institutions, not Mexican immigrants, are the source of the problems that continue to confront Mexican Americans. What is of primary concern to Mexican Americans is that they be permitted to enjoy the rights and priviledges that have been their due since 1849."(5)

In this report emphasis has centered on the growth of the Hispanic population with some mention of the newest immigrants from Asia. Still, Blacks will remain the second largest minority in the state. How will they fare in this new melange of ethnic groups? Despite some success, most Blacks remain confined to the low paying jobs and competing with the newly arrived minorities for those jobs that are available. How can 300 years of injustice be finally ended while at the same time making certain that other minorities are not also prey to discrimination?

Texas may well be entering its most crucial phase of development since it secured independence from Mexico 150 years ago. Ironically, some of the issues of that era remain unsolved. The state has always had difficulty determining the role of Mexicans and their descendants. It remains unresolved to the present day. For perhaps a century Blacks were kept first in slavery and then treated as serfs; more recently large numbers of southeast Asians have migrated to Texas and in some instances interethnic competition has led to violence. And tomorrow promises that no majorities will exist in the state. Texas will never be the same; as with the nation, it remains unfinished. The important question all Texans face is this: How will the state adjust to these demographic changes and all their repercussions?

TABLE 8.1

VOTING PARTICIPATION BY ETHNIC GROUPS: 1985, 2000, 2035

Year and Ethnic Group	Population 18 and Over	Percent Voting	Number Voting
1985			
Anglo	7767124	62	4848654
Hispanic	2318740	33	765316
Black	1407609	56	783745
2000			
Anglo	8867985	64	5664078
Hispanic	3867858	36	1375453
Black	1837226	59	1086754
2035			
Anglo	10488355	4	762626
Hispanic	8681522	37	3226849
Black	2624676	61	1603776

TABLE 8.2

PERCENT DISTRIBUTION OF VOTING POPULATION: 1985, 2000, 2035: BY ETHNIC GROUP

Year and Ethnic Group	Population 18 and Over (percent)	Population Voting (percent)
1985		
Anglo	68	76
Hispanic	20	12
Black	12	12
Total	100	100
2000		
Anglo	60	70
Hispanic	27	17
Black	13	13
Total	100	100
2035		
Anglo	48	58
Hispanic	40	28
Black	12	14
Total	100	100

TABLE 8.3

PROJECTED POPULATION 65 AND OVER BY ETHNIC GROUP, 1985-2035
(in thousands)

Year	Ethnic Group				
	Anglo	Hisp.	Black	Asian	Total
1985	1144	162	149	13	1468
1990	1224	194	155	20	1593
2000	1318	276	180	39	1813
2010	1507	392	229	72	2200
2025	2531	933	489	155	4128
2035	2801	1409	644	215	5069

Notes - Chapter VIII

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Chapter IX

Mexican Population: Implications for Texas

Scenario C, our high immigration model, may seem absurdly high to some readers. With recent legislation restricting illegal immigration passed by the U.S. Congress this alternative projection may indeed prove to be excessive. However, if clandestine movements are allowed to continue undeterred, the number of persons crossing the Rio Grande is likely to grow and grow in future years. A survey of the demographic and economic situation in Mexico attests to that possibility.

Mexico's Population: At mid-century, Mexico's population stood at 27 million; it has now surpassed 80 million and is growing at about 2.5 percent annually. Under the most conservative assumptions that assume a continued decline in fertility, Mexico's population will reach 109 million by the turn of the century and 154 million in 2025. The number of inhabitants increased by about 53 million between 1950 and 1985; about 75 million will be added between now and 2025.

What caused this incredibly rapid growth over such a brief period and why will such growth continue despite successes in reducing fertility?

Until about 1970 fertility was very high. As recently as 1965 Mexican women averaged 6.7 live births. That together with a significant decline in mortality, particularly among infants and children, contributed to massive gains in the rate of growth. Life expectancy increased from 47.6 years at birth in 1950 to 65.7 years in the early 1980s. High birth rates combined with falling death rates boost growth and by the 1970s, Mexico's growth rate was above 3 percent per year. If such a rate were maintained the population would double itself in about 20 years.

These changing patterns of fertility and mortality reshaped the country's age distribution. At mid-century, about 40 percent of Mexico's population was under age 15; by 1970 it was approaching 50 percent; since then it has fallen slightly. With such a young population a momentum for growth is built-in.

Momentum is particularly effective in a young population like that noted in Mexico. "Although the growth rate has declined, that rate now applies to such a large base that the numbers added each year continue to mount...Large populations take about a generation to

slow to zero growth after fertility reaches the replacement level because of the demographic momentum built into their age structures swollen with extra-large proportions of young people in or about to enter the childbearing ages as a result of past high fertility." (1) Mexico is nowhere near approaching replacement level fertility; its total fertility rate is still a relatively high 4.4. (2).

It is not surprising that Mexico grew so rapidly in recent decades; and it is not surprising that rapid gains can be expected in future decades given the large number of children and young adults in its present population. Indeed the built-in momentum for growth is so strong that even if fertility falls to the point where women are averaging only 2.5 live births soon after the turn of the century, the population will still double between now and 2025. Furthermore, at that date, the rate of growth will be 1 percent per year. Simply stated, while women will have fewer children, the number of such women will be so enormous, that the number of births will increase for many decades to come.

To be sure, fertility as well as mortality and migration could vary greatly over the next fifty years and these long term projections are speculative. However, the short-term future requires little speculation. It is clear that for the next twenty years or so Mexico will feel the impact of its very rapid growth during the 1955-1975 period. According to the newest United Nations projections, Mexican young adults aged 15-24 will grow by 5 1/2 million between 1985 and 2000 -- from 16.5 to 22 million. By 2025, their numbers will reach almost 25 million. (3) "This 'youth' wave can be seen in the population age pyramids for Mexico in 1980, 1990, and 2000. Prepared by Mexico's National Population Council, the projections for 1990 and 2000 assume that Mexico will reach its target of a 1 percent annual rate of popultion growth by 2000, through reduced fertility and net emigration of 110,000 persons a year. Births before 1980 are expanding the youth age groups, so that by 1990 the widest band is for males and females aged 15-19." (4)

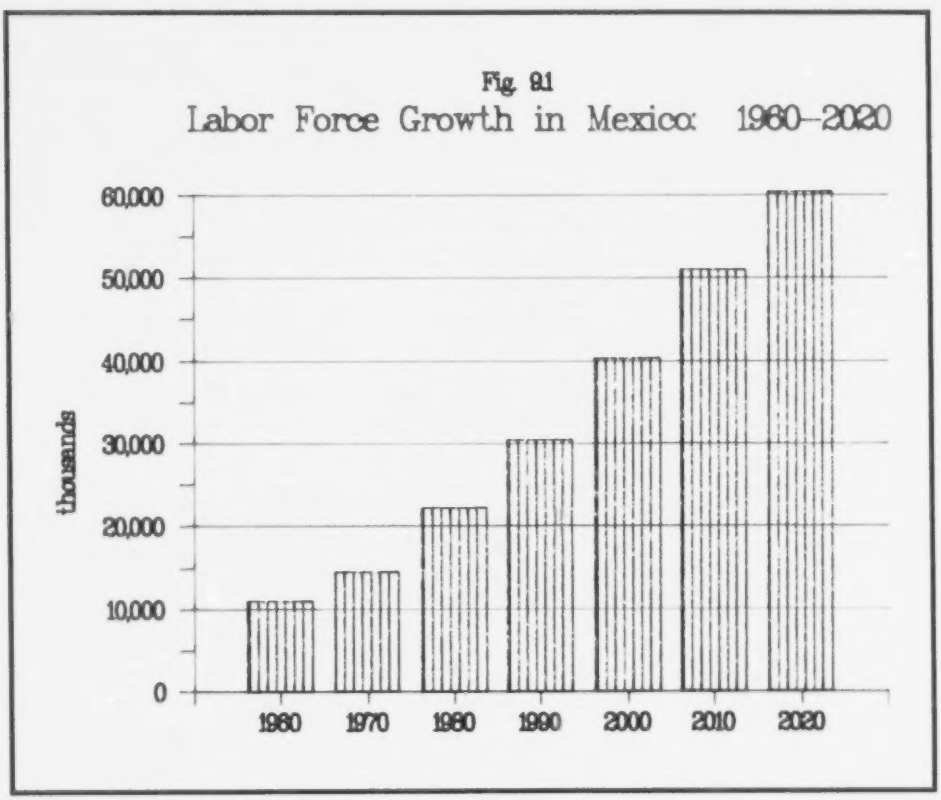
But this is only the "tip of the employment iceberg," so to speak. Mexico's labor force totalled 26 million in 1985 The International Labour Office (ILO) projects its labor force to grow by 3.2 percent yearly throughout the 1980s and by 2.9 percent yearly in the 1990s. (5) (Fig. 9.1)

"As Mexico moves into the late 1980s, the number of new entrants each year will grow to more than 900,000, and surpass one million by the end of the century. Mexico's labor force will have risen from 14.4 million in 1970 to 40.4 million in the year 2000, an increase of 180 percent...After the turn of the century, Mexico's labor force will continue to grow by more than one million a year until 2010 when the changing age distribution will begin to slow the pace of labor force growth." (6)

Determining Mexico's unemployment rate is difficult. Noted Mexican economist, Victor Urquidi stated in March 1986 that 3.5 million of Mexico's labor force were unemployed and 9 million were underemployed (7). This suggests that about half of Mexico's labor force lacks adequate work. Should such a high rate continue, 20 million Mexicans would be either unemployed or underemployed in 2000; clearly an unacceptable situation.

Proposed economic solutions carry staggering price tages that are compounded by Mexico's onerous debt burdens and low investment rates. Its investment rate fell by 38 percent between 1981, the peak year for its job creations, and 1984 -- a decline of nearly $40 billion a year. Demographer Thomas Espenshade has estimated that the total amount of additional investment needed by 2000 to keep labor demand from falling further behind labor supply could exceed a half trillion dollars.(8)

Fig. 21



As economic conditions worsen in Mexico and as the peso is constantly being devaluated, Mexicans in search of work, particularly young adults, move to urban areas in hopes of securing employment. Mexico City, now the world's largest city, has an estimated population of 17 million and is projected to grow to 26 million by 2000. But the most rapid gains are in the urban areas near the United States border. For example, the 13 Mexican portions of the "twin" border cities grew by 355.1 percent between 1950 and 1980. Ciudad Juarez's population went from 137,624 to 544,496; Matamoros increased by 311.7 percent - from 45,846 to 188,745 (9) (Table 9.2)

The built-in momentum for growth resulting from the concurrent high fertility and declining mortality of the 1960s and 1970s, as well as the depressed economic conditions presently noted in Mexico are together contributing to the development of massive movements not only to its urban centers but increasingly across the border into the southwestern states including Texas. Such an eventuality cannot be casually dismissed; it is a probability that could easily become a reality in the near future.

As University of Texas demographers, Benjamin Bradshaw and W. Parker Frisbie conclude: "In Mexico, the projected number of entrants to the labor force ages will be about 48 percent larger in the 1980s than the number that entered in the 1970s, and entrants will outnumber departures by about 407 to 100. The values for the 1980s represent 50 year highs with respect to both labor force replacement and relative increases in it. In the 1990s, the number of new entrants exceeds departures by "only" 330 per 100...Although the resulting 19 percent decrement in the labor force replacement ratio is a striking departure from the historical trend and even though some segments of Mexico's economy have been quite strong until recently, the potential for diminution of the northward surge of labor migration from Mexico does not appear particularly great at this juncture." (10)

TABLE 9.1

LABOR FORCE GROWTH IN MEXICO: 1960-2020
(in thousands)

Year	Labor Force	Growth Rate	New Entrants (Annual)
1960	11056	2.74	340
1970	14489	4.38	775
1980	22248	3.23	820
1990	30487	3.17	1000
2000	40442	2.87	1050
2010	51014	2.35	935
2020	60358	1.70	700

Source: ILO (see ref.)

TABLE 9.2

POPULATION OF MEXICAN TWIN BORDER CITIES: 1950-1980

City	Population 1950	Population 1980	Percent Change 1950-1980
Tijuana	59952	429500	616.4
Mexicali	64609	341559	428.7
San Luis	4079	76684	1780.0
Nogales	24478	65603	168.0
Agua Prieta	10471	28862	175.6
Palomas	694	2072	198.6
Ciudad Juarez	137624	544496	295.6
Ojinaga	4568	18162	297.6
Piedras Negras	27581	67455	144.6
Nuevo Laredo	57668	201731	249.8
Reynosa	34097	194693	471.2
Matamoros	45846	188745	311.7
Total	483029	2198460	355.1

Source: Ladman (see ref.)

Notes - Chapter IX

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Chapter X

Texas in the Twenty-first Century

Texas will experience dramatic shifts in population composition as it enters the twenty-first century. These changes will affect every institution in the state--from kindergarten to retirement; from the economic to the political. We do not claim that our projections will be totally accurate; we are confident, however, that the trends themselves will reflect reality. Texas will become older and more heterogenous in future years. These are the facts that Texas must deal with, and adapt to, as it proceeds towards its bicentennial anniversary in 2036.

Fertility and migration will both play important roles in determining the size and composition of the state's population; in neither case can the state do much about determining their level. Residents of the United States have the right to have as many or as few children as they desire; they also have the freedom to move between states as they see fit. Immigration can be limited, but only through federal efforts. Yet, as we have seen, the difference in the impact of legal as compared to legal combined with illegal immigration is dramatic.

Clandestine movements across the border should be eliminated or at least limited; that is the general agreement of liberals and conservatives alike throughout the nation. It remains to be seen, of course, how much the 1986 immigration legislation will slow down the flow of illegals. As noted earlier, however, several features of that legislation, especially the failure to deal forthrightly with the identification question, make it doubtful that it will really do much to moderate the flow of illegals. A fundamental reality is the fact that the job disparities between the U.S. and Mexico are likely to continue to be so strong that really vigorous efforts would be required to stop the flow of illegals even with the most effective enforcement measures. In the long run, therefore, it is in the interest of Texas and the U.S. for Mexico to develop in a way that would be mutually beneficial to them and the U.S. In our view, this will require more effective efforts to reduce Mexico's external debt and provide more capital for growth. Adequate job creation in Mexico will require more labor-intensive economic development, especially in rural areas. A broader view of U.S. self interest requires much greater attention to economic development of all third world countries, especially Mexico. The huge job deficit faced by these countries will affect the

U.S. directly through immigration or indirectly through wage competition in international trade.

While polls indicate that most Americans favor putting a halt to illegal entries, some people disagree. Conservative agribusiness interests have long argued for the need to employ low-wage farm workers to gather their crops and they have insisted that Americans will not take such demeaning jobs. At the other end of the political spectrum, a few Hispanic irridentists see the present movement of people as a demographic revolution that will ensure revenge for the unfortunate war of 1847. As James Michener's mythical character, Senorita Enriqueta Muzquiz so eloquently put it:

> What is happening is simple in process, glorious in effect. We are quietly reclaiming the land which Santa Anna lost through his insane vanity. Vast areas which are rightfully Mexican are coming back to us. No battles...no gunfire...no animosities, simply the inexorable movement of people north. The anglos still control the banks, the newspapers, the courts, but we have the power which always triumphs in the end, the power of people.(1)

For the nation, and particularly for states like Texas and California, the facts are obvious. High levels of immigration will be with us for a long time.

These are the demographic, economic, and social facts that Texas must contend with in the next century. Little can be done to alter these powerful forces that will shape the size and appearance of the state for decades to come. It is thus vital that responsible leaders, in and out of government, address the next issue: how will the state adapt to these significant changes?

It was early spring in 1987; the sesquicentennial celebration was over; the economic crisis confronting Texas had caused such concern that the legislature established a task force to examine the issues posed by the report. The basic concerns causing the legislature to appoint the task force were the projected role of minorities in the Texas population and continuing immigration from Mexico and other developing countries. These developments came at a time when a number of reports, especially one by the Carnegie Forum on Education and the Economy's Task Force on Teaching made it clear that economic competitiveness in international markets would require radical and expensive improvements in education. This report came at the same time that one by Marshall and Bouvier projected that a very large proportion of the net growth in school enrollments and the work force would be by minorities, especially Hispanics, who have serious educational deficiencies. Simultaneously, declining oil prices had caused revenue losses of over $3 billion to the Texas state government. The legislature, meeting in January 1987, faced the task of making critical decisions affecting the state's future. Of particular concern was what to do about state revenues, what kinds of

economic development policies the state should adopt to diversify the economy, what should be done about increasing poverty in the state because of high and rising unemployment, and what should be done about the poor education levels of adult Texans already in the work force. There was, in addition, considerable concern about the high cost of crime. One report had just concluded that the cost of about $35,000 a year to keep an inmate in the Texas state prison system had caused an increasing number of criminals to be released from the system.

In light of these developments, the task force was asked to make suggestions as to how to adapt to this emerging demographic and economic situation. Its members were encouraged to explore any area; to leave no stone unturned; but to come up with definite suggestions as to how to proceed in the future. The task force consisted of six members, covering the political spectrum from left to right and representing various interest groups. The chair had no vote and served simply as coordinator and, on occasion, as referee!

From its inception it was obvious that no consensus would ever emerge from the task force's deliberations. The interests and ideologies of the members were far too diverse. After numerous consultations with historians, philosophers, economists, sociologists, and theologians; after countless hearings throughout the state at which individual residents made presentations, the task force remained divided on what should be done over the next few decades. The legislature was provided with two alternatives. One argued for a maintenance of the status quo; the other argued for massive changes in intergroup relations.

Three task force members felt it vital that Texas continue along the path it had followed for the past 150 years. The three included a prominent Baptist minister, a ranch owner and a Dallas real estate tycoon. They were not unanimously opposed to illegal immigration; the ranch owner argued rather persuasively for the need to maintain a low-wage labor force. Otherwise, retail prices would soar, leading to high inflation rates, and the state would lose jobs to lower-wage places, especially Mexico. The other members felt that immigration should be limited to legal entries so as to minimize the impact of heterogeneity on the state's population.

Maintenance of economic and political power by Anglos also was a matter of concern for these task force members. This was not racist; rather, "Anglos built this state and there is no need for Anglos to give it up." Minority group members would be acceptable, but for the most part, Mexicans and Blacks would continue to form the lower class of Texas society. According to these task force members, Hispanics especially would continue to be satisfied with low wages in marginal jobs because they knew conditions were much worse in Mexico and other developing countries in the hemisphere. Moreover, continued immigration from Mexico would help stabilize that country politically and weaken the power of radicals who supported Fidel Castro or the Sandinistas. Ambivalence best described these task force members' view of the role of Asians in

the Texas of the 21st century. This perhaps reflected the small number, and the recency of the arrival of Asians on the Texas scene.

All three were adamantly opposed to providing additional state social services of any kind to low-income residents. Legal immigrants should receive the same benefits the state offered to its citizens, but no special effort should be made to allow immigrants to advance rapidly socially or economically, including education for the children. There was unanimity insofar as language was concerned. "If a Mexican moves here and plans to live here, he Goddamn well better learn English," was the way the rancher put it to the embarrassment of the Baptist minister.

The real estate entrepreneur pointed out rather adroitly that concern for a so-called "Mexican takeover" was exaggerated. "Despite their growing numbers, we can make sure they won't take over our financial enterprises; from past experience we know that they don't vote in large numbers, so we need not fear any political takeover, except in a few counties, and they are welcome to those. The uncertain legal status of Mexicans and the steady flow of new immigrants not only will keep wages down but also minimize their tendency to vote. Finally, even the demographic projections that we've all been reading are misleading. Do you gentlemen (they were all males) realize that except for the border region, Hispanics won't even come close to surpassing Anglos anywhere else in the state, even with illegal immigration? So let's not get excited about what those authors called heterogeneity. It is simply not going to happen."

The recommendations from this wing of the task force were straightforward: Let us try to reinforce our traditional economic bases, including oil and agriculture, at the same time that we encourage the growth of hi-tech industries. Domestic migration into Texas would then increase, thereby minimizing the impact of immigration. Insofar as the new immigrants are concerned, we see no need for any major changes in our attitudes and support. While the undocumenteds should not receive any assistance from the state, those entering legally should be treated like all other residents. We strongly oppose any form of discrimination but no special programs or preferential treatment should be introduced simply for the benefit of the new immigrants.

The other members of the task force consisted of a black female university economics professor, an attorney serving in the state legislature, and a Mexican-American engineer. While they occasionally disagreed among themselves, they were unanimous in their opposition to most of the views of the other task force members.

Considerable anxiety was expressed over the possible "tidal wave" of immigrants, mostly undocumented, who might come to Texas from Central America as well as Mexico. All agreed that federal legislation passed to limit such movements should be vigorously enforced. Short of such success, increased funding for the Border Patrol was recommended. These task force

members also thought Texas should deal with its fiscal crisis by increasing the tax base to at least bring the state up to the national average in taxes relative to per capita income. They agreed that the very best way to do this would be for the state to adopt an income tax, but they felt that conservative economic interests had so successfully indoctrinated the political system against such a tax that it would take considerably more political courage to propose this course than was visible at that time. The increased revenues from whatever tax increases the state's leaders could be persuaded to adopt should be used to extend the educational improvements adopted by the legislature in 1984. This group also argued for increased resources for the Literacy Task Force appointed by the governor in 1986, and the adoption of a more vigorous state economic development strategy to generate more and better jobs in the state. It likewise recommended special efforts to strengthen intercultural relations in order to maximize the advantages of a multi-cultural, multi-ethnic society while minimizing the conflicts. They further thought it very important for the Texas Congressional delegation to urge the federal government to pay more attention to Mexico and its problems and to work with international organizations to promote economic development and remove the impediments to growth created by Mexico's external debt. In an increasingly interdependent global economy, these task force members felt that Texas had much to gain from a more rapidly growing Mexican economy. By contrast, this group was very concerned that slow economic growth, a narrowing of the migration "safety valve" and a loosening of the ruling PRI's grip on the Mexican government could create serious political instability in Mexico, adding a flood of political refugees to the present flow of immigrants from Mexico.

The Marshall and Bouvier report's emphasis on the aging and increasing diversity of the Texas population did not fall on deaf ears. As the Mexican-American engineer put it: "Even if we are successful in keeping illegal immigration to a minimum, we will be faced with massive upheavals in age composition and in the ethnic composition of many such age groups. Texas demography is changing and I suggest that Texas society change as well." This approach set the tone for further discussions among these three task force members.

The economist was particularly worried about the future size and composition of the labor force. She pointed out that the state might experience a shortage of well-trained young people because of the baby bust. She reminded the members that shortly after the turn of the century, almost all new additions to the labor force would consist of women and minorities. Migration from other states could alleviate some of the problem, but what should we do about the continuing incursion of young adults from south of the border? A labor shortage was not such a bad challenge as it would raise wages (a position diametrically opposed to that of the rancher, among others), but the demand for well-trained and educated personnel would still have to be filled.

The lawyer-legislator went one step further. Texas should really move into the 21st century, by minimizing its dependence on oil and agriculture. "The current oil glut and the suffering it has caused so many Texans in the long run is the best thing that ever happened to our state." He argued, as only a lawyer can, for massive increases in educational funding to better prepare all Texans for the hi-tech society of the future. Coming from an Anglo, this view was embraced by the two minority persons on the task force. The engineer went on to quote from Michener's historical novel that apparently had been read by all members of the task force.

"In reply to a question from the audience which asked: 'What patterns will the Anglos and Mexicans devise for sharing our state?' the chairman of Michener's hypothetical task force stated: '. . .no heavier cloud threatens our state than our reluctance to define the future relationship between the so-called Mexican and the Anglo. This uncertainty keeps us fragmented into unwarranted cells, and I see no solution to this ugly estrangement.'" (2) To this, the economics professor added: "And so too with us Blacks."

The recommendations from this half of the task force were considered quite radical. First, let's do everything possible at all levels of government to reduce illegal immigration to a minimum. Second, let's improve our entire educational system to better prepare all Texans for a role in the 21st century, making certain in the process that fluency in the English language is mandatory. Third, let's accept all minorities, and Mexicans in particular because they are the most numerous, into our boardrooms, our political leadership clubs, our highest levels of education, and industry. In a word, let Texas become the first truly successful multi-cultural, multi-racial society in the world.

To be sure, these scenarios were quite disparate and presumably the governor and his successors chose a middle ground, as politicians are apt to do. But let us turn to the year 2036--the Texas bicentennial celebration. What kinds of societies would result from the two adaptation recommendations of the 1987 governor's task force?

Austin, Texas: April 19, 2036. Today, the state of Texas remembers the battle of San Jacinto and celebrates the 200th anniversary of independence. Almost 30 million people reside in the state's 220 counties and festivities are planned in all of them. As is often the case in such situations, a governor's task force has been appointed to examine the past and how it has determined the present. Gov. J.R. Ewing III has asked this task force to concentrate on the most recent 50 years given the notoriety associated with a monograph examining Texas' future written in 1986 and the resulting task force appointed in 1987 to look at alternative futures.

The 2036 group concludes that the conservative approach recommended by certain members

of the 1987 task force resulted in both good and bad. Unfortunately, the federal government did not vigorously enforce immigration legislation passed in 1986 until the mid-1990s. By then, the numbers coming across the Rio Grande were enormous; by then, hostilities between ethnic groups had mounted to the point of bloodshed. To be sure, the Texas task force could not be faulted for these tragic developments. Indeed, by recommending a strict course of not giving in to minority demands, the state has remained Anglo, in numbers as well as in power. As a result, much hostility has been constrained.

As the Hispanic population grew, and as the Anglo population failed to reproduce itself, it became increasingly clear that something had to be done to maintain the historical relations between the two groups. This was achieved through the formation of a new state, South Texas, or Tejas el Sud as it is called by its residents. (Few non-Texans are aware of the fact that Texas can subdivide itself into as many as five states at any time it so desires.) South Texas includes the 34 counties at or near the Mexican border; it is at least 85 percent Mexican and remains to this day a primarily rural and poor region of the nation. Of all the 51 states, it ranks lowest in most social and economic indicators.

The real Texas has not prospered as might have been expected. The cornucopian predictions of some seers of the 1980s had failed to come about. Indeed, the opposite proved to be true: ". . on average it will take more energy to explore for new U.S. oil and gas than the wells will produce. . .U.S. oil will be virtually exhausted by 2020.(3) As a result, the state was not adequately prepared to enter the hi-tech and robotic era that got under way around 2005. We have competed on an unequal footing with California, Massachusetts, and other states who had the foresight to plan for the future.

However, with the separation of South Texas we have been able to maintain our southern traditions. Minorities, Blacks and Asians as well as Hispanics, have been accepted into the labor force but to this very day they have not shown much progress in education and occupation; and of course they remain minorities in a predominantly Anglo society.

Unfortunately, the creation of South Texas did not solve the problem because the stream of unemployed South Texans were now streaming into Austin, San Antonio, Houston, Dallas, and other Texas cities, making it very difficult to finance social services and adequate education. Texas' prison population had become the largest in the U.S., and Texas' main growth industry had become prison management and security systems companies. Moreover, there was serious concern that the Mexican rebel leader Fidel Ortega's guerilla group might topple the Mexican government and establish closer relations with Communist countries. U.S. President Ronald Bush has already sent large numbers of troops to the South Texas border and rumors of a U.S. invasion of Mexico are rampant. The Soviet Union, by contrast, has deployed more nuclear

submarines into the Gulf of Mexico and its naval base in Guantanamo Bay, which it had taken over from the Americans in 1996. There is some concern on the U.S. side because of doubts about the loyalty of Mexican-American and Black troops, who had been increasingly radicalized by militants who gained considerable support from the growing polarization of incomes between Anglos and minorities in the U.S. There also is concern that the armed forces, made up mainly of minorities and low-income Anglos, have experienced serious disciplinary problems, which the Army's largely Anglo officers have not been able to control.

Some question the direction taken by our leaders over the past half a century; perhaps Texas has fallen behind some of its sister states in the race to enter the twenty-first century and all that entails. On the other hand, Texans are still Texans--that has not changed nor will it in the foreseeable future.

Austin, Texas: April 19, 2036. Today the state of Texas remembers the battle of San Jacinto and celebrates the 200th anniversary of independence. Over 35 million people reside in the state's 254 countries and festivities are planned in all of them. As is often the case in such situations, a governor's task force has been appointed to examine the past and how it has determined the present. Gov. Billy Jo Martinez has asked this task force to concentrate on the most recent fifty years given the concern expressed in 1986 with ethnic diversity and the related recommendations suggested by a task force appointed in 1987 to look at alternative futures.

It hasn't been any easy half a century. The recommendations of the so-called radical wing of the 1987 task force were accepted and put into practice by almost every governor since then. The federal government's failure to enforce immigration legislation passed in 1986 made conditions quite difficult. Illegal movements increased substantially, surpassing one million in some years. While many went to California, Texas received more than its share of these uneducated newcomers. The amnesty provisions of the 1986 Act allowed many of these new residents to gain legal status and a surprising proportion later applied for citizenship.

The costs involved in putting into practice the educational recommendations of the 1987 task force were astronomical and necessitated tax increases; increases that dwarfed those approved in 1986. We cannot deny that the 1990s were fraught with dangers and racial animosity often led to armed conflicts between Mexicans and Blacks on the one hand and Anglos on the other. The relatively small Asian population was fairly successful in keeping out of this growing controversy.

Yet the state leadership, political, religious and business, agreed that a new relationship had to emerge between the major ethnic groups of the state. On one hand, the new immigrants, Mexicans in particular, were expected to become loyal Americans and that was best demonstrated by (1) learning English adequately and (2) becoming citizens. On the other hand,

Anglos were expected to share their power and influence with the new minorities in a manner never before demonstrated, That was the supreme challenge proffered to Texas. Were the Anglos finally willing to completely share power (political as well as economic) with Hispanics, Blacks, and Asians? With rare exceptions, the answer was affirmative.

In a state which now has no numerical majority, which has a governor of Hispanic ancestry and which has representatives of all ethnic groups on the boards of its leading financial institutions, it is becoming increasingly apparent that Texas is indeed a truly multi-ethnic state, where members of all groups can succeed if they have the talents.

Therein lies the secret to the success of this admittedly dangerous path that has been followed since 1987. Adequate education was made available to all; education that would prepare the willing youngsters to participate in the hi-tech society of the twenty-first century. The state's leaders discovered that the returns to investment in their people were very large indeed--education expenditures paying for themselves in four years at the most, which was a much higher return than could be achieved on any other investment. Today, Texas is at the center of the hi-tech and robotic industries of the nation. Its universities are considered among the very best in the nation.

One would be naive to conclude that all goes well with Texans. The very concept of Texan has changed dramatically and some residents have not taken kindly to these radical shifts in the nature of our society. But time heals all and time will surely take care of this problem.

Conclusion: The challenges presented to Texas by the changing demographic and economic profile are awesome to contemplate. Yet they must be met if the state is to remain competitive in the twenty-first century. The principal question is the one posed to the chairman of Michener's hypothetical task force alluded to earlier: "What patterns will the Anglos and the Mexicans devise for sharing our state?" Both groups, and Blacks and Asians too, must be willing to compromise.

Mexicans in particular must become truly Texan while maintaining their historical culture if they so desire. Anglos must willingly give up some of their power. As columnist Carl Rowan recently put it in commenting on the Japanese Prime Minister's derogatory remarks about Blacks and Hispanics: "...since Blacks and Hispanics are not about to disappear, the white majority must ask what privileges it is willing to give up, which prejudices it will renounce, in order to allow, even help, minorities to gain the education, the skills that will make them competitive...."(4)

Notes - Chapter X

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3. Gever, John et al. Beyond Oil. Ballinger Publishing Company, Cambridge, Mass., 1986, p. xxix.
4. Rowan, Carl, "Living With the Melting Pot," The Virginian-Pilot, October 1, 1986, p. A-11.

Appendix

Demographic Assumptions

This appendix describes and explains the rationale for the assumptions used in developing the projections for this report.

Methodology: The cohort-component projection method is used throughout this study. This is the most accurate means to develop estimates of future population size and is the only method recognized as adequate by statisticans and demographers alike. First, a base year population for each population group divided into five-year age and sex categories is required. The base population is then advanced in five-year intervals. For each period, births are added according to specified age-specific fertility rates, deaths are subtracted according to stated age-sex specific survival probabilities, and net migration is added according to the assumed level for each age-sex group. At any five-year interval, age groups can be recombined to produce an estimate of the population in that year.(1)

In this study, population projections were prepared for six separate sub-populations. Four ethnic divisions were created: Anglo; Black; Hispanic; Asian and Other. For the four resident ethnic groups, their populations according to the 1980 Census served as our starting points. These were projected forward to 1985 according to the most reasonable assumptions of recent demographic behavior. These newly constructed 1985 populations form the bases for all further projections in this study.

The two other subgroups are the post-1985 immigrants and their descendants from Latin America and from Asia. As will be noted below, no further net immigration is assumed from predominantly White or Black countries although net domestic in-migration will continue for both groups. For those coming from Latin America or from Asia, no base population was needed, given the fact that they consist solely of immigrants who arrived in Texas after 1985. (As it is not possible to multiply by 0, each age-sex category was given a value of 1!). Projections for these two groups provide a determination of the contribution of immigrants (including their fertility and mortality after entering the state) to the eventual population of Texas. Once these six projections are completed, they can be combined in any desired manner, as appropriate to the topic under scrutiny.

The six projections for the fifty-year period 1985-2035, depend on assumptions about demographic behavior. All humans are population actors: We are born or we give birth; we

move-- never, once, often, perhaps across a state or international border. Eventually we all die, but our life expectancy is affected by who we are, where we live, and how we live. The results of these millions upon millions of demographic acts yield the fertility, mortality and migration rates -- the major ingredients in the making of a population projection.

Fertility Assumptions: The most recent data on birth rates from the National Center for Health Statistics (NCHS) indicate a U.S. total fertility rate of 1.74 for Whites; 2.3 for Blacks. In the fertility assumptions used for its projections, the U.S. Census Bueau estimates the rate for the 1980-85 period to be 1.783 for Whites and 2.321 for Blacks. It further calculates the overall rate for Texas as 2.17 or 1.164 greater than for the nation.

Official fertility estimates for the 1985 resident Hispanics and Asians are more difficult to locate given the paucity of data at this time. According to a 1983 NCHS report, "Mexican women and 'other Hispanic' women had the highest fertility rates [among Hispanics]. 102.8 and 108.8 per women 15-44 years of age, respectively." (2) This is about 62 percent greater than the overall fertility rate (the number of births per 1000 women between 15 and 64) for all women. Based on this, as well as other sources dealing with Texas fertility (3), we assume the total fertility rate for resident Hispanic women to be 3.0 in 1985.

Data on Asian fertility are even more difficult to locate. What is available indicates wide divergence among the numerous Asian ethnic groups in the United States. Demographer Robert Gardner has analyzed the 1980 census to arrive at some reasonable estimates of children ever born to Asian mothers. (4) Japanese and Chinese fertility is slightly below the national average; Korean and Indian approximate that average; Filipino and Vietnamese fertility is considerably higher. Fragmentary reports suggest that other Southeast Asians (Kampucheans and Laotians including Hmomgs) exhibit even higher fertility. Given that an overwhelming proportion of the Asian population of Texas comes from Southeast Asia, we assume their fertiity in 1985 to be the same as that of Hispanics, that is, 3.0 live births per woman.

Overall the total fertility rate estimated for Texas in 1985 is 2.12. That is slightly less than that estimated by the U.S. Census Bureau (2.17) noted earlier.

Fertility levels for all 1985 residents and descendants will converge by 2035 at 1.8. Thus, for all four ethnic groups, save the Anglos, fertility will decline gradually over that fifty-year period. For Anglos, it will rise imperceptively. A brief review of the literature on this topic explains this assumption. Particularly relevant is the excellent work of University of Texas at Austin demographer, Frank Bean and his associates. (5) They have demonstrated that both length of residence in the United States and improvement in social status contribute to

lower fertility among Mexicans. Similar research has shown such a relationship for other minority groups.

Whether overall fertility remains at its current historical low mark or rises or falls even more in future years cannot be determined. In most developed countries, the picture is the same: Fertility rates are lower than ever recorded, and generally are lower than those in the United States. With rare exceptions, most experts do not expect any significant increases in fertility for the foreseeable future; a few suggest further declines. We take a middle course and keep fertility at its current level.

Post-1985 immigrants require different sets of fertility assumptions. Unfortunately, statistical evidence documenting their fertility is almost nil. To arrive at what seem fairly reasonable assumptions, we rely on the scant information available and some estimate of fertility for country of origin. The total fertility rate for both Hispanics and Asians at time of entrance (i.e. 1985) is assumed to be 4.0. Such a level is just a little lower than that noted in Mexico, Central America and Southeast Asian countries. Furthermore, numerous studies have found that immigrants have lower fertility than their non-migrating counterparts.(6) Reasons for this are many. Those leaving an area are likely to be better educated and more motivated than those who remain. Furthermore, most migrate in their early adult years and pregnancies are sometimes postponed and even avoided given the problems associated with the move. Finally, the migrants often take on some of the norms of the receiving country. These may include increased labor force participation on the part of married women as well as a tendency to have smaller families. We assume that fertility levels will continue to drop in countries of origin. This is particularly true in Mexico. Thus, those immigrating in 1995, for example, will exhibit fertility reflecting the mode in that country at that point in time. We therefore assume that fertility will fall over the next fifty years to 2.2 by 2035 for all post-1985 immigrants and their descendants.

Mortality Assumptions: Assumptions about future life expectancy, necessary for determining age-sex specific survival rates, are much simpler to develop than those for either fertility or migration. Slight variations in life expectancy do not affect the size of a future population significantly though the age distribution is altered somewhat. Furthermore, fluctuations such as noted for fertility and migration are seldom seen in mortality.

We assume that all six sub-groups will converge by 2035 to a life expectancy of 76 for males and 80 for females. Progress will occur over the fifty year period for all ethnic groups. Anglos will extend their life expectancy from 70 for males and 75 for females; Blacks, Hispanics and Asians from 67 and 72. No distinction is made between residents and post-

1985 immigrants. (7) These are fairly conservative assumptions about future mortality. Greater improvements in life expectancy are quite possible, given recent strides in medical science and the growing awareness of "wellness" on the part of many Americans. Such conservatism on our part reflects our reluctance to err on the "high" side.

Migration Assumptions: By far the most tenuous aspect of making projections is developing assumptions about the future movement of people. The size and age distribution of receiving as well as sending regions are drastically affected. Furthermore, radical shifts in migration patterns can and do occur over very short periods. The experience of the city of Houston in the early 1980s attests to this point. People move in order to better their lots. For some this means crossing an international border in search of any job. For others, it means moving from one part of the nation to another in search of better employment. Thus, regional economic environment is a crucial factor that determines the level of migration into or out of that region. As has been noted elsewhere, "people move to Texas when jobs and wages are better, relative to the rest of the nation."(8) Many projection models are econometric rather than demographic. That is, assumptions concentrate on job creation and people move to where the jobs are. The Texas Economic-Demographic Forecasting Model (TEDFM) is an example. Our projections are strictly demographic. Migration will occur at certain stated levels and at least some jobs will be created to account for this growth.

Over the 1980-1984 period, legal immigration to Texas (as intended state of residence) has hovered around 45,000. We assume that annual net immigration (that is, immigrants - emigrants) will be 47,500 annually. We do not know how many people leave the United States in any given year. A recent study estimates the number to be around 100,000, most of them Anglo.(9) It seems reasonable to assume that close to ten percent leave from Texas. Thus our assumption of 47,500 annual net migration results from about 58,500 entering and 9,000 leaving the state and the nation.

The allocation of the 47,500 by the four ethnic groups is based on data from the 1980-85 Yearbooks of the INS. About 45 percent of all legal immigrants settling in Texas come from Mexico; 15 percent from other Latin American countries, mainly Central America; 35 percent from Asian or Other sources; 5 percent from Canada or Europe. Black immigration from Haiti and African countries is very small though increasing slightly. Because much of the emigration from the United States (and, implicitly, from Texas) is by Anglos, we have not included them in our projections for legal immigration. In sum, our projections for net legal immigration include: Hispanic 30,000 (of whom 22,500 are Mexican); Asian and Other 17,500.

How many clandestine movements are there to Texas? No one knows. Texas

demographers Frank Bean and Allan King estimate that "the number of illegal migrants in Texas in 1980 ranges from about 600,000 to about 900,000." (10) How many enter in any single year remains a puzzle. Almost all illegal entries come across the Rio Grande. For our purposes, then, all illegal immigrants are Hispanic. If legal net immigration from Latin America is 30,000 then illegal net immigration should be no greater and possibly somewhat less. Undoubtedly a larger proportion of illegal than legal immigrants return to their homeland. Furthermore, researchers at the Population Research Center of the University of Texas suggest that numerous illegal entrants into Texas move on to California.(11) For our Scenario B projections, annual covert movements are assumed to total 25,000. In sum, total net immigration to Texas under Scenario B is 55,000 Hispanic; 17,500 Asian and Other. Again the possibility of erring on the conservative side is noted. For that reason, Scenario C has been prepared which assumes that net immigration from Latin America will be triple that noted under Scenario B. Thus, total net immigration under the High Scenario is 182,000 of whom 17,500 are Asian or Other and 165,000 are Hispanic (about 135,000 illegal).

The age-sex distribution of immigrants is derived from analysis of the INS data for 1980-1984 for selected Latin American and Asian countries. These are applied to the totals mentioned above. In the case of immigration from Latin America, the proportion of young adults in Scenario C is increased at the expense of both the very young and the elderly to account for the proportion of immigrants who are illegal. Indirect evidence suggests that illegal immigrants are younger, on average, than their legal counterparts.

Domestic, or internal, migration is directly related to the health of the economy, and that is subject to major fluctuations over time. In the late seventies domestic migration to Texas was well over 100,000 per year. By the early eighties, it soared even higher. This was followed by massive declines to perhaps as low as 30,000 by 1984. Expensive oil followed by an oil glut explains these wide shifts in migration levels. We assume a constant level of net domestic migration of 50,000 per year (40,000 Anglo and 10,000 Black). Because of the fairly high level of Hispanic immigration in these projections, we are not assuming any internal movements of Hispanics into the state. However, it should be noted that such a movement is occuring. Frank Bean and Marta Tienda document "a decided tendency for each of the Spanish origin groups to migrate to the South between 1975 and 1980."(12) Continued large scale fluctuations can be expected, but it is not possible to arbitrarily pinpoint dates for such occurrences. Our assumption may prove to be low or possibly high. In a sense, the number of internal arrivals is related to the number of immigrants. The greater the latter; the smaller the former if jobs are the chief generator of migration.

The age-sex distribution for net domestic migration is assumed to be the same as

exhibited by migrants during the 1980-1984 period as noted by the Census Bureau.

Our total migration assumptions under Scenario B amount to 122,500 per year - 72,500 international, of which 25,000 are clandestine, and 50,000 are domestic. Ethnically, the breakdown is as follows: 55,000 Hispanic, 40,000 Anglo, 17,500 Asian and Other, and 10,000 Black. For Scenario C, the total is 232,500 divided as follows: Hispanic 165,000; Asian and Other 17,500; Anglo 40,000; Black 10,000.

These are the demographic assumptions upon which our projections are based. Most readers will disagree with at least some of them. Again, these are not intended as predictions. The results are merely the answers to the question: "What if these assumptions are proven accurate?" The addition of Scenarios A and C should give sufficient additional information on population size and composition to allow the reader to better interpret our projections and fit them into his or her views of the future demographic behavior that will affect the state of Texas.

Notes

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